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CLASS STRUCTURE AND SOCIAL MOBILITY IN HONG KONG : AN ANALYSIS OF THE 1981 CENSUS DATA

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ABSTRACT

"Hong Kong is a land of abundant opportunities and these opportunities are distributed among her inhabitants by achievement rather than ascription." Such a conviction has been confirmed by a number of empirical studies as a common belief among the Hong Kong Chinese. The objective of this study is to verify whether this subjective perception is an objective fact within the social structure of Hong Kong.

Based upon the Weberian conceptions of economic and social class-situations, three hypotheses were formulated and tested in this study. They are :

Hypothesis 1 *There is a wide range of variations in market situations among economic classes in Hong Kong.*

Hypothesis 2 *The economic classes in Hong Kong cluster together in a way to form a limited number of social classes.*

Hypothesis 3 *In Hong Kong, an individual's attainment of class situation depends on individual achievement rather than ascription.*

With reference to **Hypothesis 1**, a socioeconomic index for all occupational titles listed in the Hong Kong census was constructed with a 20% random sample from the 1981 census which was prepared and made available by the Census and Statistics Department Hong Kong. The index has revealed that there are wide variations in the socioeconomic status scores among occupational groupings in Hong Kong. This has confirmed that there are substantial differentials in market situations among economic classes in Hong Kong.

In regard to **Hypothesis 2**, mobility tables of fathers' class positions by offspring's early class positions were constructed with a 5% random sample from the 1981 census. A number of social mobility models were then tested. The results of the analyses have substantiated that the differentials in market situations among economic classes have been constituted into a limited number of social closures within which class inheritance and monopolization of opportunities for social mobility are maintained. More specifically, the analyses have confirmed that in Hong Kong, economic classes are *structurated* into four definite social classes, namely non-manual, skilled manual, semi-skilled manual, and unskilled manual labourers.

Hypothesis 3 was verified by a number of status attainment models which were constructed with the 5% sample from the 1981 census. These models have revealed that variations in socioeconomic status scores are not solely the effect of individuals' abilities and efforts. Family backgrounds and sex differences also assert significant impacts on individuals' opportunities of getting ahead. In other words, the analyses have substantiated that within the social structure of Hong Kong, individuals' attainments of class situations are not solely determined by individual achievement and ascription does exert a considerable impact on attainment process. were then tested.

In light of these findings, this study concludes that Hong Kong society is not as open as her inhabitants perceive.

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PROLOGUE:

STATEMENT OF THE PROBLEM

"The expectation of equality of opportunities and the perception of Hong Kong as a land of abundant opportunities seem to have been vindicated in the mind of the Hong Kong Chinese" (Lau and Kuan, 1988:66).

The above citation aptly summarizes a consensual conclusion from a stream of studies conducted in Hong Kong over the last two decades. In the early 70s, Chaney and Podmore found in their survey on young adults that 62.7 percent of respondents agreed with the statement that "Hong Kong is truly a land of opportunity and people get pretty much of what they deserve here." (1973:60) In 1969 Johnson conducted a survey on the community leaders in Tsuen Wan and found that over half of the respondents identified achievement rather than ascription as the primary determinant for individual success in Hong Kong (Johnson, 1971:252). In 1978, Lau and Ho revealed in their survey on young workers that 60 percent of respondents believed that "Hong Kong offered opportunities for upward mobile common people." (Lau and Ho, 1982) In a survey conducted in Kwun Tong in 1985, Lau and Kuan found that "an overwhelming 87.6 percent of respondents agreed or strongly agreed that Hong Kong was a place full of developmental opportunities. Hence, it is individual efforts that count in one's success or failure." (Lau and Kuan, 1988:63-64) Again in a similar survey done in 1986, Lau and Kuan found that "84.2 percent of respondents....agreedthat in Hong Kong, provided a person had the ability and worked hard, he should have the opportunity to improve his social and economic status." (1988:64) In the same study, more than half of the

respondents reported having intergeneration upward mobility (Lau and Kuan, 1988:66).

Although these research findings have strongly confirmed that the conviction of Hong Kong as an open society have been deeply implanted in the consciousness of the Hong Kong Chinese, all these findings are based on social psychological data and have not been verified with objective data. For instance, Lau and Kuan report that in their 1986 survey "a subjective sense of upward mobility appears." (1988:66) However this reported upward mobility has not been contrasted with intergenerational data on socioeconomic status. Furthermore, the subjective attribution of personal success to achievement has again not been juxtaposed with objective status attainment data.

It is, therefore, the objective of the present study to use objective data to determine whether Hong Kong is a place of abundant opportunities, and whether these opportunities are catered to individuals by achievement rather than ascription. In other words, the purpose of the present study is to investigate whether Hong Kong is an open society.

There is substantial consensus among sociologists (Hauser, 1978:920; see also Duncan, 1968: 690-692 & 694-695; Goldthorpe, 1987: 27-29; Hope, 1980; and Lipset & Bendix, 1967:81-82) that openness of society refers, first of all, not to a society as a whole but only to one aspect of its social structure, that is its occupational hierarchy, stratification system, or class structure. (Distinction of the usage of these concepts is to be explicated below. For the time being, I am going to use the general term *social hierarchy* in the following exposition.) Secondly, the word "openness" refers to the opportunities opened to individuals to move among various positions found in the social hierarchy within and across generations. Finally, openness of a society refers not

only to the chances for mobility but also to the criteria for distributing these chances. Hence, the openness of a society can also be defined as the extent to which opportunities for mobility are assigned by achievement rather than ascription. In short, it is suggested that the openness of a society can be measured by the extent of the inter- and intrageneration social mobility taking place within its social hierarchy and the determinants of these mobilities.

Hence, the questions that the present study explores can be formulated as follow :

(1) How is the occupational hierarchy in Hong Kong structured? To answer this question, a socioeconomic index for all the occupational titles listed in the Hong Kong 1981 census will be constructed. The computation of the index will be based on a twenty percent random sample from the 1981 census data which is made available by the Hong Kong Census and Statistics Department. Based upon the index, the profile of Hong Kong's social hierarchy will be explored.

(2) How do Hong Kong inhabitants move among these occupational or class categories? How are these opportunities for mobility distributed ? The answers to these questions can be obtained by analyzing the pattern and extent of inter- and intra-generation mobilities taking place in Hong Kong. The analysis will be based on a five percent random sample from the 1981 census data. Due to the structure of the data set, the present study will only concentrate on the analysis of inter-generation mobility.

(3) What factors contribute to the inter-generation mobility in Hong Kong? Is this mobility mainly attributed to individual achievement or ascription? Status attainment models will be

constructed and tested to see to what extent inter-generation mobility is affected by family background and other structural factors in Hong Kong society. The data set to be used in constructing these models is the same five percent sample used in the mobility analysis explicated in (2).

Accordingly, the pages that follow will be organized into five chapters. In Chapter One, the major theories and researches relating to the study will be reviewed. Based on this literature, the theoretical framework of the study will be explained in the first section of Chapter Two. Then the social and economic context of Hong Kong will be outlined. In light of both the theoretical framework and the empirical context, the hypotheses of the study will be explicated. The data sets used for the verification of the hypotheses will then be outlined at the end of the chapter. In Chapter Three, the first research problems identified above will be analyzed. First of all, the socioeconomic status scores of all the occupational titles found in the Hong Kong census data will be computed. Then an occupational hierarchy for Hong Kong society will be constructed accordingly. In Chapter Four, based upon the socioeconomic index constructed in Chapter Three, difference class schemata will be designed and various mobility models will be tested. Subsequently, a class structure for Hong Kong society will be identified. The third problem of the study will be explored in Chapter Five. A variety of status attainment models will be constructed and tested, so as to reveal the major factors working behind the ladder of success of Hong Kong society. Finally, in the conclusion, the major findings of the study will be recapitulated. Based on the findings, we will try to answer the question whether Hong Kong is an open society. The significance of the study will then be highlighted, and last but not least, the prospect for further study will be examined.

CHAPTER 1

ON THE SHOULDERS OF A GIANT : REVIEW OF LITERATURE

As a research area in sociology, the study of social stratification and mobility is relatively young. It was not until the end of the Second World War that the field began to take shape and since then it has developed into a major area of sociological inquiry (Goldthorpe, 1987:1; Kerckhoff, 1984; Treiman & Robinson, 1981; Wiley, 1979:794). The corpus of works accumulated over the years is so huge and rich that it is impossible to review all of them here. Therefore, the review that follows will only highlight the major works which have direct relevance to the three objectives elucidated above; and it will be organized into four sections : 1. definitions of social class and measures of socioeconomic status, 2. analysis of social mobility, 3. construction of the status attainment model, and 4. a summary.

1. DEFINITIONS OF SOCIAL CLASS AND MEASURES OF SOCIOECONOMIC STATUS

"Sociology has only one independent variable, class." (Stinchcombe, quoted in Wright, 1979:3) Stinchcombe may have exaggerated the importance of class, but one cannot deny that class is one of the most widely researched variables in sociological inquiry. However, it has also been generally regarded as a chameleon of the field, assuming different

meanings as it blends into different sociological traditions (Wright, 1979:3-4; see also Calvert, 1982; Giddens, 1981; Parkin, 1979; and Wright, 1978a). Therefore, a comprehensive typology of definitions of class is needed to summarize such a turmoil of meanings. Hence, Wright's schema is employed.

Wright (1979:3-18) groups conceptions of class into two broad categories, namely the gradational and relational conceptions. In the former perspective, "the class division is conceived as a division into groups differentiated according to the degree in which they possess the characteristic which constitutes the criterion of divisions, as for instance income-level" (Ossowski, quoted in Wright,1979:5). Thus, the common practice within the perspectives is to construct a set of grading criteria, usually quantitative, and rank the units of analysis (either individuals or groups) accordingly. Therefore, the main thrust of the perspective is the various kinds of constructs and measures of socioeconomic indices and occupational prestige scales.

The second perspective defines class primarily in terms of relation. In this perspective, social class is conceived as a system of "one-sided or mutual dependence, dependence being understood in both cases as a dependence based on causal relations." (Ossowski, quoted in Wright,1979:5) Thus, theorists of this perspective tend to construct a comprehensive relational network (either one-sided or mutually dependent) within which different classes can be allocated in a theoretically meaningful way. [1] In terms of the criteria used in the construction of the relational network, the perspective can further be divided into two sub-categories, namely the market-relational and production-relational perspectives. The former conceives class relations as a market situation and thus conceptualizes the class relational network in terms of market

capacities possessed by buyers and sellers in various kinds of commodity markets. Weber's conception of class has been regarded as the most representative formulation of this perspective. The production-relational perspective defines class relations in terms of production process. It locates different groupings into the class relational network in accordance with the positions they occupied in the production process. Marx's conception of class is the exemplar of this perspective.

Following this typology of definitions of class, the following review will be organized into three sections: (a) the gradational perspective, (b) the market-relational perspective, and (c) the production-relational perspective.

(a) *The Gradational Perspective:*

In this perspective, numerous grading criteria have been proposed and tested. In terms of the grading criteria used, at least three approaches can be identified (Haug, 1977; Nam & Powers, 1983:1-20; and Powers, 1982).

The first approach is *the occupational prestige approach*, sometimes called *the popular evaluation approach.* It is simply a survey on people's perceptions on the relative prestige of a list of occupational titles (Goldthorpe & Hope, 1974; National Opinion Research Centre,1947; Treiman,1977). This approach is built upon a number of presuppositions. The first concerns the definition of the concept of prestige. In this approach, prestige is defined as "deference-entitlement". When a person (or a group of persons) is said to possess prestige it means that others are willing to acknowledge and comply to his superiority (Shils, 1968: 106-108; Goldthorpe & Hope, 1972:23-24; and Treiman, 1977:20). The second

presupposition is that occupation roles are assumed to be the most significant entitlement to deference. It is argued that occupational role is chosen to be the main indicator because it is highly correlated with other deference-entitling properties, such as authority delegated to different occupations, income rewarded according to occupational performance, educational qualifications required, etc. (Shils, 1968:107-108; see also Duncan, 1961; Nam & Power, 1983; Goldthorpe & Hope, 1972). Finally, it is assumed that the general public is rating occupational titles in terms of their prestige (Treiman, 1977:26-29). If one accepted all these presuppositions, the procedure of constructing a occupational prestige index is in fact quite simple: work out a representative list of occupational titles, survey on a representative sample on their judgment of the relative prestige of the occupations included on the list, and calculate prestige scores for each occupation according to the rating found in the survey. The perspectives has initiated large numbers of studies around the world. Treiman has reviewed and compared 85 occupational prestige studies from 60 countries and has concluded that

> Occupational prestige hierarchies are substantially similar throughout the world. In all societies, ranging from highly industrialized nations like the United States to peasant villages in up-country Thailand, the basic pattern of occupational evaluations is the same--professional and higher managerial positions are most highly regarded, lower white-collar and skilled blue-collar jobs fall in the middle of the hierarchy, and service and laboring jobs are the least respected. (Treiman,1977:103)

The second approach is commonly called *Duncan's Socioeconomic Index*. It is named after its inventor Otis Dudley Duncan (Duncan,1961).

It has been regarded as an improvement of the occupational prestige approach in general and the NORC (National Opinion Research Centre) scale in particular. Based upon the 78 occupational prestige scores found in NORC scale, Duncan chose 45 of those, "whose NORC titles are reasonably equivalent to (1950's) census titles" (Duncan, 1961:124), and used them as the dependent variables in his analysis. On the other hand, Duncan identified educational and income levels as predictors and went to the 1950's census data to find the corresponding values for each of the 45 occupations chosen. Based upon these two sets of values a multiple regression equation was constructed.[2] Based on this equation, prestige scores for all the other occupational titles listed in the 1950's census were predicted from the corresponding census data. As a result, "a socio-economic index for all occupations" was obtained. This index has been widely used by social scientists and is considered to be an improvement of the occupational prestige approach in at least two aspects. Firstly, it is an index which has exhausted all 270 occupational titles found in the U.S. census. Secondly, the index is built upon empirically and theoretically justifiable predictors (Duncan, 1961:115-117) rather than subjective judgment. In fact, selecting educational and income levels as predictors is the basic assumption of this approach. Duncan justified his selection and the assumption as follows

> A man qualifies himself for occupational life by obtaining an education; as a consequence of pursuing his occupation, he obtains income. Occupation, therefore, is the intervening activity linking income to education. If we characterize an occupation according to the prevailing levels of education and income of its incumbents, we are not only estimating its 'social status' and its 'economic

status'. We are also describing one of the major 'causes' and one of its major 'effects'. It would not be surprising if an occupation's 'prestige' turned out to be closely related to one or both of these factors. (Duncan, 1961: 116-117)

The index has been updated and revised by other scholars (Featherman & Stevens, 1982; Siegel, 1971). According to a recent review, Duncan's approach is still recommended as a preferable approach to prestige index (Featherman & Stevens, 1982:108).

The third approach is generally called the *Nam-Powers occupational status scores* or the objective indicators approach. (Nam & Powers, 1983). Following the theoretical logic of the *Duncan's socioeconomic index*; Nam and Powers, and their colleagues in the U.S. Census Bureau, use educational and income levels as the sole predictors and calculate the socioeconomic scores for all occupational titles directly from census data. Thus, the only difference between the Duncan's index and the Nam-Powers scores is that the latter does not refer to any occupational prestige scores and simply averages the value of the two predictors to obtain the scores. The actual calculating procedure can be summarized as follows:

a. arraying detailed occupations according to the median educational level of the incumbents;
b. arraying the same occupations separately according to the median income levels of the incumbents;
c. by using the number of persons engaged in each occupation, determining the cumulative interval of persons in each occupation for each of the two arrays, beginning with the lowest-ranked occupation;

d. averaging the midpoints of the two cumulative intervals of occupants and dividing by the total... to get a status score for the occupation. (Nam & Powers, 1983:50)

A similar approach has been applied by Blishen and Carroll to the Canadian census data (Blishen & Carroll,1982) and the Nam-Powers scores have been used by social scientists in a number of studies (Nam & Powers, 1983:54-55).

To summarize, the foregone review has highlighted three approaches in social grading. One common feature is that all three approaches use occupational titles as the sole indicator for socioeconomic status.[3] The basic difference among them is the grading criterion. The occupational prestige approach uses subjective judgement on relative occupational prestige as the sole criterion. The Nam-Powers approach uses objective value of educational and income levels as the predictors for the grading, while the Duncan's socioeconomic index employed both the subjective prestige scale and the objective value of educational and income levels in its construction. For the reason to be explicated below, the Nam-Powers approach will be used in the present study.

From these three approaches, we can reveal one distinct feature of the gradation perspective. That is, in the social hierarchy conceived by this perspective, there are as many strata as there are occupational titles. Thus, it has been criticized by theorists of the relational perspective that such a "indefinite multiplicity of classes" (Giddens, 1981:100) is unable to provide a comprehensive and theoretically justifiable class structure, which should consist of only "a number of classes manageable enough for the explication of the major components of social structure and the process of social change" (Giddens, 1981: 101). In my opinion, the argument here reveals one of the fundamental

differences between the two perspectives on the conception of social hierarchy . For the gradational perspective, social hierarchy is defined simply as an array of occupations (or any other units of analysis) in a descending order. While the relational perspective views social hierarchy as relational structure or class structure which should provide insight for "the explication of the major components of social structure and the process of social change." In fact, the terminologies used by theorists of these two perspectives have aptly reflected this basic difference. For instance, Duncan chooses "stratification system" to refer to the social hierarchy (Duncan, 1968), while Hauser (1978), another leading advocate of the gradational perspective uses the even more neutral term "occupational hierarchy". Relational theorists use the term "class structure". Therefore, in the following explanation I am going to reserve the terms "occupational hierarchy" and "occupational statuses" for the reference of the gradational perspective, and leave the terms "class structure" and "classes" for the relational perspective.

(b) The Market-Relational Perspective :

It has been widely contended that Weber's conception of class is basically a market-relational perspective (Cox, 1950; Giddens, 1981:41-52 & 99-117; Goldthorpe, 1987:40; Marshall et al., 1989:13-30; Murphy, 1985; Parkin, 1979; Wenger,1987; and Wright, 1979:2-18). The following review will therefore concentrate on explicating some of the Weberian theories and researches of the conception of class.

It has been pointed out that in explicating Weber's conception of class, a distinction between the concepts "economic class" [4] and "social class" is of vital importance (Collins, 1986:132-138; and Giddens, 1981:

41-52). In an early vision of his conception of economic class (Weber, 1978:926-940), Weber states that

> We speak of a *class* when (1) a number of people have in common a specific causal component of their life chances, insofar as (2) this component is represented exclusively by economic interests in the possession of goods and opportunities for income, and (3) is represented under the conditions of the commodity or labor markets. This is *class situation*. (1978:927)

We can see that Weber conceives class as a group of individuals sharing common life chances in labor or commodity markets. Thus, Weber summarizes that "class situation is, in this sense, ultimately market situation" (Weber, 1978:928).

In terms of market situation, Weber broadly divides class into two categories: the propertied and the propertyless. Under the mode of distribution prevailing in both the commodity and labor markets, the propertied is given "a monopoly on the possibility of transferring property from the sphere of use as *wealth* to the sphere of *capital*, that is, it gives them the entrepreneurial function and all chances to share directly or indirectly in returns on capital" (Weber,1978:927). While the propertyless, facing the same market situation, "have nothing to offer but their labor or the resulting products, and...are compelled to get rid of these products in order to subsist at all" (Weber, 1978:927).

Later in his career, Weber elaborates his conception of economic class by subdividing it into two: "property class" and "commercial class". The former "is primarily determined by the property differences" and the latter "by the marketability of goods and services" (Weber, 1978:302). Weber refines his schema by introducing another dimension into his

classification. That is, each economic class can be subdivided into three layers: the positively privileged, middle class, and the negatively privileged. Thus, Weber's conception of economic class can be summarized in Table 1.1.1.

TABLE1.1.1. *Weber's Conception of Economic Class*

	Property Class	Commercial class
Positively Privileged	Rentiers, receiving income from : a) men (the case of slave-owners) b) land c) mines d) installations (factories & equipments) e) ships f) creditors (of live-stocks, gain or money) g) securities	Entrepreneurs : a) merchants b) shipowners c) industrial and d) agricultural entrepreneurs e) bankers and financiers sometimes also f) professionals with sought-after expertise or privileged education (e.g. lawyers, physicians, artists) g) workers with monopolistic qualifications and skills
Middle Class	Those who make a living from their property of their acquired skills (e.g. some of the commercial classes)	a) self-employed farmers and craftsmen b) public and private officials
Negatively Privileged	a) the unfree b) the declassed (the proletarii of Antiquity), c) debtors, d) the "Paupers"	labourers with varying qualifications : a) skilled b) semi-skilled c) unskilled

Source : Weber,1978:303-305.

Apart from the concept of economic class, Weber introduces another concept into his theory of class, that is "social class". "A 'social class' makes up the totality of those class situations within which individual and generational mobility is easy and typical" (Weber,1978:302). A number of Weberian theorists have pointed out that the concept of social class is of vital importance in understanding Weber's theory of class. For example, Giddens [5]

> the notion of social class is important because it introduces a unifying theme into the diversity of cross-cutting class relationships which may stem from Weber's identification of 'class situation' with 'market position'. If the latter is applied strictly, it is possible to distinguish an almost endless multiplicity of class situations. But a 'social class' exists only when these class situations cluster together in such a way as to create a common nexus of social interchange between individuals. (1981:49)

In other words, Giddens suggests that social class can be understood as a cluster of economic classes which shares similar chances for social mobility both within and across generations.

On the other hand, Parkin, another prominent Weberian theorist, highlights Weber's concept of closure and suggests that it is the core of Weber's theory of class. According to Weber, "closure...is an ever-recurring process...toward the monopolization of specific, usually economic, opportunities. ...This monopolization is directed against competitors who share some positive or negative characteristics; its purpose is always the closure of social and economic opportunities to outsiders" (Weber, 1978: 342). By applying Weber's concept of closure to

the analysis of class structure , Parkin suggests that the bourgeoisie constructs and maintains itself as the dominant class in modern capitalist societies by monopolizing the opportunities for acquisition of both productive and cultural capitals and excluding the proletariat and their descendants from encroaching into these social closures (Parkin, 1979:47-60). Parkin further suggests that in reaction to the exclusionary closure of the dominant class, the dominated class would also organize itself into closure in a form of usurpation. By usurpation, Parkin refers to the "collective attempts by the excluded to win a greater share of resources" and to bite into the privileges that the dominant classes have monopolized (Parkin, 1979:44 & 75-88). Thus, we can see that, in Parkin conception, social closure is understood as a two-way process which consists of, on one hand, the exclusionary closure constructed and maintained by the dominant class and, on the other hand, the usurpationary closure organized by the subordinate class. As Parkin himself concludes, "exclusion and usurpation may...be regarded as the two main generic types of social closure, the latter always being a consequence of, and collective response to the former" (1979:45).

Taken together, Weber and his followers define social class as a cluster of economic classes which takes the form of a social closure, within which the opportunities for both inter- and intra-generational mobilities are easy and typical. Accordingly, Weber simply divides social class into four categories. They are

a) the working class as a whole---the more so, the more automated the working process becomes,
b) the petty bourgeoisie,
c) the propertyless intelligentsia and specialists (technicians, various kinds of white-collar employees,

civil servants--- possibly with considerable social differences depending on the cost of their training),

d) the class privileged through property and education. (1978:305)

Based upon Weber's distinction between economic class and social class, Giddens works out his theory of class structuration. Class structuration refers to "the process whereby *economic classes* become *social classes*" (1981:105). In other words, it is a process through which "indefinite multiplicity of cross-cutting interests created by differentiated market capacities" is grouped into a limited number of clusters in a structured form (Giddens, 1981:105-106).

One of the primary factors[6] affecting the process of class structuration, Giddens suggests, is "the distribution of mobility chances which pertain within a given society" (Giddens,1981:107). The nature of the process, Giddens explicates, is that

> In general, the greater the degree of 'closure' of mobility chances---both intergenerationally and within the career of the individual---the more this facilitates the formation of identifiable classes. For the effect of closure in terms of intergenerational movement is to provide for the reproduction of common life experience over the generations; and this homogenization of experience is reinforced to the degree to which the individual's movement within the labor market is confined to occupations which generate a similar range of material outcomes. In general we may state that the structuration of classes is facilitated to the degree to which mobility closure exists

in relation to any specified form of market capacity.

(Giddens, 1981:107)

It is worth underlining here that the Weberian theory of "social class" provides a vital theoretical basis for the integration of the gradational perspective with the market-relational perspective. We have seen in the previous section that all three approaches in the gradational perspective use occupation as the sole indicators in their calculation, and two of these approaches also use educational and income levels as primary predictors in their analysis. If we take these three variables and locate them in the context of the Weberian conception of economic class, it will be quite apparent that these three variables can be taken as indicators for the market capacities of different economic classes. Thus, the Duncan and Nam-Power indices can be taken as measures of what the Weberians called "the multiplicity of differentiated market capacities". In fact, such implication has been well documented by theorists of both perspectives. For instance, we have seen, in a quotation cited in the previous section, that Duncan is arguing for the fact that education-occupation-income as a causal chain actually reflects the capacity---the balancing and purchasing powers---of the incumbents of a particular occupation within both the labor and commodity markets. In the work collaborating with Blau, Duncan furthers his argument by explicitly relating occupations to Weber's concept of economic class.

> Occupational position is not identical either with *economic class* or with prestige status, but it is closely connected with both, particularly with the former. Class may be defined in terms of economic resources and interests, and the primary determinant of these for the large majority of men is their occupational position. ... If class refers to

> the role persons occupy in the economy and their managerial influence on economic concerns, it is more accurately reflected in a man's specific occupation than his employment status in contemporary society, where the economy is dominated by corporations rather than individual proprietors. Occupational position does not encompass all aspects of the concept of class, but it is probably the best single indicator of it. (Blau & Duncan, 1967:6-7)

Goldthorpe, a theorist of the gradational perspective in Britain, also relates the occupational grading scale, which he and his colleagues have constructed in the Oxford Social Mobility Study (Goldthorpe and Hope, 1974), to Weber's concept of economic class and market situation. He contends that their scale is able

> to bring together...occupations whose incumbents will typically share in broadly similar *market and work situations* ...(and) combine occupational categories whose members would appear...to be typically comparable, on one hand, in terms of their sources and levels of income and other conditions of employment, in their degree of economic security and in their chances for economic advancement; and on the other hand, in their location within the systems of authority and control governing the processes of production in which they are engaged. (Goldthorpe, 1987:40; see also Marshall et al., 1988:21-23)

As for the Weberians, they also indicate that occupation, education and income are major factors influencing market capacity. For example, Giddens points out that

> As Weber indicates, possession of recognized 'skills'--including educational qualifications--is the major factor influencing market capacity. Differentiations in market capacity may be used ...to secure economic returns other than income as such. These include, principally, security of employment, prospects of career advancement, and a range of 'fringe benefits', such as pension rights, etc.. (1981:103)

Collins, another well known Weberian, also considers occupation the primary factor in class formation. He suggests that

> Occupations are the way people keep themselves alive. This is the reason for their fundamental importance. Occupations shape the differences among people, however, not merely by the fact that work is essential for survival, but because people relate to each other in different ways in this inescapable area of their lives. Occupations are the major basis of class cultures; these cultures, in turn, along with material resources for inter-communication, are the mechanisms that organize classes as communities. (1975: 61-62)

Taken together, it is suggested here that we may take Duncan's or Nam-Powers' socioeconomic index as the operationalized measurement of the Weberians' concept of market situations of economic classes. Conversely speaking, Weberians' schema of market and class situations can be viewed as the theoretical foundation for the construction of the socioeconomic index.

As for the operationalization of the concept of social class and class structuration, both Goldthorpe (1987:39-68) and Breiger (1981)

assert that social mobility analysis and more specifically the modeling techniques derived from mobility-table analysis can be taken as measures of both concepts. For example, Goldthorpe suggests that social mobility analyses can be related to the Weberian concept of social closure and class structuration in the following ways:

> First, mobility has been seen, to take over Giddens's terminology, as a basic source of class 'structuration": it is the rate and pattern of mobility that will determine the extent to which classes may be recognized as collectivities of individuals or families occupying similar locations within the social division of labour over time. Secondly, it has been suggested that the extent of mobility evident within a society may be taken as a significant indicator of the prevailing balance of advantage and power in class relations and, further, of characteristic modes of class action. Parkin, for example, has argued that class conflict is to an important degree expressed in the form of strategies of exclusion, chiefly adopted by more advantaged groupings; and counter-strategies of solidarism, which are typically the resort of those in less advantaged situations. Mobility rates and patterns can thus serve to reveal, on one hand, the effectiveness of the former; and, on the other hand, at least the potential for success of the latter. (Goldthorpe, 1987:39)

As for Breiger's more technical assertion, it will be discussed in the following section on mobility-table analysis.

(c) The Production-Relation Perspective :

It is of general consensus that Marxists define class primarily in terms of relation of production. Hence, the Marxist conception of class can be viewed as the exemplar of the production-relational perspective. The following review will, therefore, concentrate mainly on works of some Marxists. [7]

As we have pointed out in the previous section (cf. note 6) that a distinction between class and status is essential to the comprehension of the Weberian theory of class; it is also of vital importance to make a distinction between the concepts of "class in itself" and "class for itself", if we are to have a clear understanding of the Marxist conception of class.

"Class in itself" refers to the objective location individuals occupy in the prevailing relation of production in a society. In Poulantzas' words, it refers to the "class place" structurally determined by the prevailing relation of production and it is independent of the will of its incumbents (Poulantzas, 1978:14-24). While "class for itself" refers to the position individuals take within the prevailing form of class contradiction and class struggle in a society. Again in Poulantzas' words, it refers to the "class position" deliberately taken by individuals whose decisions are politically and ideologically conditioned. Thus, "class consciousness" and "autonomous political organizations" are two of the major determinants in the formation of "class position" (Poulantzas, 1978:14-16 & 24-35).

Poulantzas suggests that class formation is the result of the interplay of the economic, political and ideological forces prevailing in

a given society. Poulantzas further specifies that the formation of "class place"--class in itself--is primarily determined in the economic sphere--the mode and relation of production, while the formation of "class position"--class for itself--is mainly the result of the interplay of the political and ideological forces (1978:16).

Since the main concern of the present study, in Marxist terms, is the definition of class places and class boundaries, the review that follows will concentrate only on the works concerning the formation of class places and its relation to production process. In other words, the works on the ideological and political aspects of class formation will not be explored.

In production process, men relate themselves to nature and to the productive forces (both labor and means of production); at the same time, they also relate to each other. (Poulantzas, 1978:18) It is out of these relationships that the Marxist concept of class emerges. Poulantzas decomposes these relations into: (a) the relationship between the non-worker (the owner) and the productive forces; and (b) the relationship between the immediate producer (the direct worker) and the productive forces. Out of these two relationships, two basic Marxist class divisions emerge. On one hand, it is "the exploiting class" which consists of those who own and control the productive forces or at least the means of production. On the other, it is "the exploited class" which consists of, particularly under capitalism, those who possess no productive forces except their labor, and thus have to sell their labor power in the market in order to subsist.

Poulantzas furthers his elaboration of Marxist theory of class by drawing our attention to the fact that in contemporary capitalism, the "ownership" of means of production has been differentiated into at least

two categories.[8] "(a) economic ownership: by this is meant real economic control of the means of production, i.e. the power to assign the means of production to given uses and so to dispose of the products obtained" (Poulantzas,1978:18). In other words, it means investment and accumulation (Wright, 1979:33). "(b) possession: by this is meant the capacity to put the means of production into operation" (Poulantzas, 1978:18). That is, it refers to the management of the production process and it can further be divided into control over the actual physical means of production and control over labor power (Wright, 1979:33). Summarizing this classification of relations of production, Wright constructs a table (cf. Table 1.1.2.) to explicate the basic differentiation of class places.

TABLE 1.1.2.: *Formal Class Division within Capitalistic Mode of Production*

	Processes Underlying Class Relation		
	Economic Ownership	Possession	
Class	Control over Investment and the Accumulation Process	Control over Physical Means of Production	Control over Labor Power of Others
Bourgeoisie	+	+	+
Proletariat	-	-	-
Petty Bourgeoisie	+	+	-

Source: Wright, 1979: 27.
+ Full Control
- No Control

This class division represents only the abstract or pure model of the Marxist conception of class which is based on the general and formal structure of mode of production (Poulantzas, 1978:22; see also Giddens, 1981:27-28). It is suggested that as this model is applied to specific society, especially modern capitalism, the social formation of classes will be much more complicated (Poulantzas, 1978:22-23; see also Giddens, 1981:27-28). Based upon the formal model outlined by Poulantzas, Wright develops a detailed class division, specifically for advanced capitalism, by introducing a number of intermediate classes into the three basic divisions (Wright, 1978a:30-110). This model is presented in Table 1.1.3.

Wright furthers his exposition by operationalizing his conception of class in advanced capitalism and applying the measures to a study--- Survey of Working Condition (Wright, 1979; see also Wright and Perrone, 1977; and Wright, 1978b). In his analysis, Wright argues that his measures derived form Marxist class categories prove to be a more powerful predictor than Duncan's socioeconomic index in explaining the variance of income level (see especially Wright and Perrone, 1977: 44,tab.4).

In conclusion, in this section I have reviewed the works of the three perspectives on the study of social class; namely the gradational, market-relational, and production-relational perspectives. In the process, I have tried to integrate the gradational perspective with the Weberian market-relational model. Subsequently, we have two sets of definitions and measures of class originating from two giant figures of the discipline--- Weber and Marx. In the sections that follow we will see how these two conceptions are applied to the studies of social mobility.

DIAGRAM 1.1.3. : *Concrete Class Division within Capitalistic Social Formation*

Class Divisions	Sub-Divisions	Processes Underlying Class Relation			
		Economic Ownership	Possession		Legal Ownership
		Control over Investment and the Accumulation Process	Control over Physical Means of Production	Control over Labor Power of Others	Legal Title to Property (e.g. stock ownership)
Bourgeoisie	Traditional Capitalist	+	+	+	+
	Top Corporate Executive	+	+	+	Partial
	Top Managers	Partial/Minimal	+	+	Minimal
Intermediate Classes Between the Bourgeoisie and the Proletariat	Middle Managers	Minimal	Partial	Partial	-
	Technocrats	Minimal	Minimal	Minimal	-
	Foremen/Supervisors	-	-	Minimal	-
Proletariat		-	-	-	-
Intermediate Classes Between the Proletariat and Petty Bourgeoisie	Semiautonomous employees	Minimal	Minimal	-	-
Petty Bourgeoisie		+	+	-	+
Intermediate Classes Between the Petty Bourgeoisie and the Bourgeoisie	Small Employers	+	+	Minimal	+

Source : Wright, 1979 : 40.

+ : Full Control
- : No Control
Partial : Attenuated Control
Minimal : Residual Control

2. ANALYSIS OF SOCIAL MOBILITY

Based upon the aforementioned conceptions of class and class structure, we can now proceed to see how sociologists analyze the movements made by individuals among the various occupational or class categories, within or across their generations, that is, the analysis of social mobility. The works on social mobility can broadly be classified into two areas. One area concentrates mainly on the analysis of the pattern and extent of social mobility in particular times and places, that is in different societies at different phases of development. The other area is primarily concerned with exploring the factors contributing to social mobility. The review in this section will concentrate only on the works in the former area. Works of the latter, which is commonly called the status attainment study, will be reviewed in the next section.

In terms of the nature of the problems and the analytical tools used, the analyses of social mobility can broadly be classified into two groups. I will call them (a) propositions of social mobility in industrialized society and (b) analyses on social fluidity and openness. The following review will, therefore, be organized accordingly.

(a) *Propositions of Social Mobility in Industrialized Society :*

It has been generally agreed that it was Lipset and Bendix, in their work entitled "Social Mobility in Industrial Society", (1967) who first propose the thesis of relating social mobility to industrialization. The Lipset-Bendix thesis can be summarized by the following propositions :

(1) Industrialization enhances social mobility. Lipset and Bendix write, "Our tentative interpretation is that the social mobility

of societies becomes relatively high once their industrialization, and hence their economic expansion, reaches a certain level" (1967:13).

(2) The contribution of industrialization to social mobility is a universal phenomenon regardless of cultural and structural differences among societies. Based upon the fact that "the overall pattern of social mobility appears to be much the same in the industrial societies of various Western countries" (1967:13), Lipset and Bendix postulate, "The similarities in rates of mass mobility (manual to non-manual) among countries with such diverse social structures, suggest that propensity for mobility cannot be correlated with national cultural patterns, since some cultures encourage and others discourage social mobility." (1967:73)

(3) These general increases in social mobility in industrial societies are mainly due to changes in occupational structure. According to Lipset and Bendix, "the data support the hypothesis that mobility patterns in Western industrial societies are determined by the occupational structure" (1967:73).

The Lipset-Bendix thesis has triggered a number of studies on measuring the amount of social mobility in different Western industrial societies (Archer & Giner, 1971; Erikson et al., 1979; Featherman & Hauser, 1978; Goldthorpe, 1980/1987; Hope, 1980; Treiman, 1970). In the process, the conception and measurement of social mobility have vigorously been modified. One of the most significant modifications is the distinction between concepts, such as absolute and relative mobility, and structural and exchange (or circulative) mobility.

Absolute mobility refers to the total amount of mobility observed at a given point of time in a society, while relative mobility means the

amount of mobility obtained after comparing it with some norm or standard, such as changes in occupational structure (Goldthorpe, 1987:29 see also Boudon, 1973:17-18). As for structural mobility, it refers to the amount of mobility facilitated by changes in social structure, such as the occupational structure or class structure. Finally, exchange mobility means the amount of absolute mobility which is not structural, that is the mobility assumed to be caused by exchange of statuses among individuals of different social origins.

Delineation of different kinds of social mobility has greatly enhanced the precision of the propositions in Lipset-Bendix thesis. Thus, the propositions have been reformulated by a number of scholars (cf. Erikson et al., 1979; Treiman,1970). It is proposed that the Proposition (1) in the Lipset-Bendix thesis could be reformulated as follows:

1.1. Absolute mobility increases with industrialization;

1.2. Structural mobility increases with industrialization; and

1.3. Exchange mobility increases with industrialization.

The validity of Proposition 1.1. has been verified by numbers of studies conducted in different Western industrialized societies. However, when the absolute mobility is partitioned into structural and exchange mobility as in Propositions 1.2. and 1.3., the picture becomes less clear. For instance, Treiman (1970) and Featherman and Hauser (1978:92-94) found that both structural and exchange mobility increase over time in the United States and similar findings have also been revealed in France (Thelot, quoted in Erikson, 1983). In England, however, both Hope (1980) and Goldthorpe (1980/1987) found no significant changes in exchange mobility over time, and a study in Norway also obtained a similar result (Rogoff Ramsoy, quoted in Erikson, 1983).

These inconclusive findings on exchange mobility in different

Western industrial societies have led to the reformulation of the Proposition (2) of the Lipset-Bendix thesis. It is proposed that the association between industrialization and increase in exchange mobility is not universally applied to all Western industrialized societies. Furthermore, it has been postulated that exchange mobility is probably conditioned by the cultural and structural parameters of a given society. Based upon this reformulation, a stream of researches on "social fluidity" or "openness of society" has been initiated (Goldthorpe, 1987; Hope, 1980; Featherman & Hauser, 1978). The theoretical proposition and analytical strategies employed in these researches are to be discussed in the next section. In the remaining section, I am going to explicate the various measurements of social mobility which are derived from the numerous studies around the proposition in industrialization and mobility.

One of the primary objectives of the researches on the association between industrialization and mobility is to measure the amount of various kinds of mobility. In fact, a number of mathematical measurements have been developed through the years. They can broadly be grouped into two approaches, namely the mobility table approach and the socioeconomic index approach. The former derives its measurements of mobility from the mobility table which is a contingency table cross-classifying data of occupational or class categories of fathers and sons. Thus, this kind of measurement is based on categorical data (cf. Boudon, 1973:7-39), while the latter derives its measurement from socioeconomic index, hence it is a measurement based on interval data (McClendon,1977).

The mobility table approach has a long tradition and relatively higher popularity in mobility study. The pioneer of the approach is the British sociologist D.V. Glass (1954) who developed index measuring the rate of mobility as well as immobility for each cell in a mobility table.

However it has been pointed out by a number of scholars that the Glass index suffers from many conceptual as well as mathematical flaws (Boudon, 1973:15-16), among which is that it is unable to partition the structural mobility from the exchange mobility. The first effort to overcome such a conceptual flaw is the Yasuda's index, which was developed by Saburo Yasuda. Subsequently, following the logic of the Yasuda's index, a number of mobility indices have been worked out, for instance, Boudon's index and Matras index (Boudon, 1973:23-39). The basic logic of these indices can best be grasped by understanding how different concepts of mobility are operationally defined.

In a mobility table with identical occupational categories of fathers and sons, immobility is represented by the frequency counts found in the diagonal cells, while mobility is represented by the frequency counts in the off-diagonals. Therefore, the total or absolute mobility can be measured by subtracting the counts in all the diagonal cells from the total counts in a mobility table.

$$\text{Total Mobility} = N - \sum_{i} n_{ii}$$

where N = total counts in a mobility table
n_{ii} = counts in diagonal cell
i = number of rows
j = number of columns

As for the structural mobility, it is defined as the difference between the marginals ($n_{i.}$ and $n_{.i}$) of the table. This definition is based upon the assumption that the marginals of the rows and columns in a mobility table actually reflect the occupational or class structures where the fathers and sons are located. Thus, the difference between the marginals is assumed to represent the changes between the occupational structures of the fathers and those of the sons.

$$\text{Structural Exchange} = N - \sum_{i} \min(n_{i.}, n_{.i})$$

Finally, exchange mobility is defined as mobility that is not structural. Thus, it is simply the difference between the total and structural mobility.

$$\text{Exchange Mobility} = \text{Total Mobility} - \text{Structural Mobility}$$

Based upon these definitions, different kinds of ratios of mobility can then be calculated accordingly

$$\text{Total Mobility Ratio} = \text{Total Mobility} / N$$

$$\text{Structural Mobility Ratio} = \frac{\text{Structural Mobility}}{\text{Total Mobility}}$$

$$\text{Exchange Mobility Ratio} = \frac{\text{Total Mobility} - \text{Structural Mobility}}{\text{Total Mobility}}$$

These mathematical measurements of mobility have been widely used in researches on social mobility around the world. In fact, all the aforecited comparative studies on mobility in Western industrial societies are possible simply because similar measurements are used.

Apart from the measurements derived from the mobility table, various kinds of social mobility can also be measured by mathematical instruments derived from socioeconomic indices. For instance, making use of Duncan's socioeconomic index, McKee J. McClendon has worked out a set of measurements of absolute, structural and exchange mobility (McClendon, 1977).

In summary, the most significant contributions of these studies on social mobility in industrialized society can be summarized in two aspects. First, these studies have inspired the development of mathematical measurements of mobility. Such measurements have been the main thrust of developing mobility study into one of the most sophisticated----both methodologically and statistically----areas in sociological inquiry (Boudon, 1973; Pullman, 1975; Hout,1983). Second, these studies have conceptually clarified the definition of the problem to be inquired in mobility study. They have redirected the focus of study from the measurement of overall mobility (i.e. absolute mobility) in industrial society to investigation into fluidity or openness (i.e. indicated by exchange mobility) in particular societies. These investigations on social fluidity and openness will be examined in the following section. to do the testing.

(b) ***Analyses on Social Fluidity and Openness:***

The theoretical origin of the propositions of social mobility in open society can be traced back to nineteenth-century liberalism when it was believed that "ample opportunity existed under liberal democracy for every individual to occupy a place in society suited to his capacity" (Goldthorpe, 1987:3). Such equalitarianism or meritocraticism can also be found in the expositions of some contemporary sociologists; for instance, Parson's famous dichotomy of ascription-achievement orientation in social selection (Parson et al., 1950; see also Crowder, 1974) or Bell's thesis on meritocracy in post-industrial society (Bell, 1973:408-455).

These theses of equalitarian-meritocraticism are exactly what the

study on social mobility in open society sets out to verify. According to these theses, it is assumed that in an open society, individuals should be perfectly mobile among various occupational or class categories. In other words, there should be no occupational or class inheritance in such a society (Pullman, 1975; Bowles & Nelson, 1974). One way to verify this thesis of perfect mobility is to test whether there is interaction between the rows (which conventionally indicate the occupational or class categories of fathers) and columns (which represent those of the sons) in a mobility table. Conventionally, log-linear modeling techniques have been employed to do the testing. The basic logic is to compare the estimated frequency counts with the observed counts and to see whether the Likelihood Chi-Square supports the perfect mobility model (i.e. non-interaction model) (Goodman, 1965, 1969a & 1969b; Hauser et al.,1975a; Hout, 1983). Another way to test the perfect mobility model is to calculate the correlation between the socioeconomic scores of fathers and sons to see whether inheritance of socioeconomic status exists (Duncan, 1967:109-110;Featherman & Hauser, 1978:93).

There is substantial consensus among research findings that the perfect mobility model is in no way fit with empirical data. As a result, it has triggered a "model-hunt" within the area and a substantial amount of works have been accumulated. One of the most prominent and widely cited models is Goodman's quasi-perfect mobility model (Goodman, 1965). In the model, the diagonal cells of the mobility table, which are assumed to indicate the occupational or class inheritance, are blocked out in the log-linear analysis so as to test the effect of the diagonals on the model. Based on the logic of Goodman's model, a number of models have been developed to test the various effects on mobility. For example, Hauser's model which deals with structural mobility (Hauser et al.,1975a &

b), the corners model which highlights the barriers to mobility at the top and bottom of the social hierarchy (Goodman, 1965), the Buffer-Zone model and Closure model proposed by Goldthorpe which also deal with barriers to mobility (Goldthorpe, 1987:39-68), and the symmetrical model which copes with the upward and downward directions of mobility (Goodman,1972).

The works on mobility table modeling have grown into a substantial branch in mobility study (cf. Boudon,1973; Hout,1983; Pullman, 1975). Theoretically, mobility table modeling has falsified the thesis of open society and proven the existence of occupational or class inheritance. Methodologically, it has set a successful example of applying sophisticated statistical models, such as the log-linear model, to sociological inquiry.

However, it has also been pointed out that the mobility table approach as a whole suffers from a number of theoretical and methodological flaws. Thus, it is worthwhile to explain some of them so as to guard against them when applying this approach to the present study.

Duncan (1966:54-63) points out that by assuming that a mobility table actually reveals information of occupational structures and social mobility between two generations is methodologically at fault. First of all, Duncan underlines that most of the mobility tables are based on data of the concurrent occupational status of both fathers and son. Thus, it is by no means reflecting occupational structures of two different generations. Furthermore, even if the table contains the occupational status of fathers at a prior point in time, for instance, a conventional practice is to ask the respondents to recall their fathers' occupational status when they were at school or at the age of sixteen; the effort will still be upset by the following facts. First, the difference in fertility age will upset the assumption that the fathers in the mobility table are

of the same generation. Second, according to this practice males in the "father generation" who have no sons will totally be excluded from the table, while those with high fertility may be overly represented. Taken together, Duncan concludes that

> If the sons in the mobility table are, in fact, representative of the occupational structure at some recent point in time, then the distribution of sons by their fathers' occupations ***cannot*** represent the occupational structure at some definite prior moment in time. This has nothing to do with the fallibility of retrospective reports on father's occupation. Nor can the problem be avoided by asking for a time-specific or age-specific report on father's occupation. (1966: 62)

Duncan's challenge has shed considerable doubt on the interpretations of the mobility table analysis. For instance, the aforementioned operationalized definition of structural mobility, which is based on the assumption that the marginals of the mobility table can be taken as the occupational structures of two generations, is in no way acceptable. Furthermore, the overall meaning of the mobility table has to be reinterpreted as well. In fact, Duncan recommends that

> Instead of thinking of the classification of father's occupation as conveying information about a 'generation' of 'fathers', think of it as describing the origin statuses of the sons. Particularly if the data on father's occupation apply to a time point proximate to the opening of the son's career, this origin status provides a natural base line against which one can measure the son's subsequent occupational achievement. The father-son mobility table,

then, becomes a table showing a cross-classification of origin by destination statuses of the cohorts included in the study. (1966:62-63)

Secondly, Breiger (1981) launches another critique to the mobility table analysis. He points out that "there does not exist a model of the mobility table that takes the proper number and composition of occupational categories as an explicit theoretical decision" (1981:580). It is quite apparent that Breiger's accusation is well-grounded, because in most of the mobility table analyses, scholars tend to take the classification and composition of occupational or class categories as given and seldom bother to give them any theoretical justification. Furthermore, in the process of analysis, these categories are often arbitrarily collapsed into aggregates to suit whatever the analytical purpose (see for example Goodman, 1965; Hauser et al., 1975a & b). In other words, "social mobility analysts do not take social class seriously" (Breiger, 1981:579). Taking this neglect of social class as a point of departure, Breiger uses his project to bring social class back into the centre of social mobility analysis. First, he refers to Weber's concept of "social class" and Giddens' theory of class structuration as theoretical bases. According to the two theorists, the basic criteria for the demarcation of "social classes" are the differentials in mobility chances, that is, the formation of a social class is manifested in a form of a "closure" within which the opportunities for both inter- and intra-generational mobility have been monopolized. Thus, it can be hypothesized that within a social class "mobility is easy and typical" (Weber, 1978:302) while mobility across social classes is difficult and rare. Based upon this theoretical proposition, Breiger postulates "a dual structure for occupational mobility table." Within this structure,

> what is sought is a single partition of occupational categories, applied simultaneously to the rows and columns of a mobility table. Internally, the rows and columns of each subtable resulting from this partition are unordered, with no dependence of destination on origin. Externally, the classes are ordered with respect to typical mobility chances, class of destination depending differentially on class of origin. (1981:586)

Taken together, Breiger has suggested that we should redefine the objective of mobility-table analysis. According to him, the objective should not be to look for mobility patterns which fit with a set of presumably fixed class categories, but to search for models of closures of mobility opportunities so as to determine the classification and composition of class categories. Breiger's critique has not only redefined the objective of mobility-table analysis, but has also relocated the analysis back into the mainstream theory of social class, namely, back into the Weberian tradition. Thus, Breiger's elaboration of the mobility-table analysis can be taken as a significant indicator of the Weberian concepts of social class, social closure and class structuration, which have been highlighted in the previous section.

The critiques of Duncan and Breiger have injected valuable insights into the mobility table analysis. On one hand, Breiger's critique has redefined the objective of the analysis in a way of making it theoretically much more well-grounded. On the other hand, Duncan's critique has clarified the meanings implied in a mobility table. It has rescued the analysis from the intergenerational interpretation, which Duncan asserts to be methodologically at fault, and redirected the interpretation to the origin-destination thesis.

In conclusion, in this section we have reviewed the mobility table approach in social mobility analysis. First, we have looked into some of the studies on social mobility in industrialized society and the mathematical measures of social mobility derived form these studies. Then, we have discussed some of the analyses on social fluidity and openness, and the mathematical models employed in these analyses. Finally, we have reviewed Duncan's and Breiger's critiques on some conventional practices in mobility table analysis, so as to help us to have a more reflective understanding of the research tradition. In the section that follows we will look into another research tradition in social mobility, that is the regression tradition.

3. CONSTRUCTION OF STATUS ATTAINMENT MODEL

It has commonly been recognized that within the area of mobility study, there are two distinct methodological traditions. One is the contingency-table tradition, while the other is the regression tradition (Duncan, 1979:793; Hauser, 1975b:586; & 1978:920-921; and Pullman, 1975: 2). In the previous section, I have outlined some major works of the former and in this section we will look into some of the major theories and researches of the latter. The following review will be organized in a chronological way which reflects the development of the regression tradition: (a) the Blau-Duncan status attainment model, (b) the Wisconsin model, and (c) the structural models.

(a) ***Blau-Duncan Status Attainment Model :***

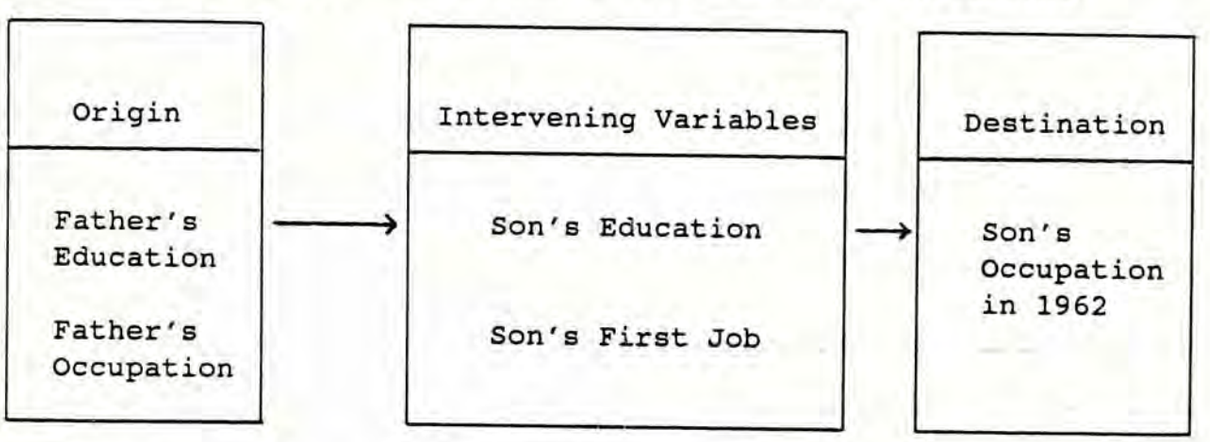
It has been of general consensus that Blau and Duncan, in their path-breaking work---- *The American Occupational Structure* (1967), have made invaluable contributions to mobility study both methodologically and conceptually. One reviewer even asserts that the work has started a "conceptual and methodological revolution" in mobility study (Kerckhoff, 1984: 140-141). Therefore it will be helpful to outline the significance of the work before we discuss the details of its theory and methodology.

Before the mid-1960s, social mobility study had been dominated by the mobility table tradition. Apart from the methodological and theoretical flaws explicated in the previous section, the mobility table tradition had also suffered from one essential methodological limitation. Within the tradition, the focus of analysis was limited to the descriptive level, focusing on exploring the general patterns of social mobility but not providing any explanation to them (Kerckhoff, 1984). By utilizing the socioeconomic index constructed by Duncan (1961; cf. 2.1.(a)), Blau and Duncan transformed the occupational categories from a categorical variable to a continuous variable. As a result, more refined statistical models, such as regression analysis, can be used in the study. Based upon this methodological refinement, various kinds of intervening variables can then be introduced into the study. Thus, it conceptually transforms the conventional model of cross-tabulation of origin by destination to a model of attainment path. Subsequently, it has raised the level of inquiry of mobility study from exploratory and descriptive to explanatory and analytical.

Blau and Duncan start their analysis with a basic model which injects two intervening variables into the conventional origin-destination

model. The two intervening variables are educational levels and early work experiences (the first jobs) of the sons. The model is presented in Figure 1.3.1.. This basic model was tested against a data set collected in the United States in March, 1962, which contains 20,700 males aged 20 to 64. The analysis reveals that the model can explain 43 percent of the variance of the sons' occupational status in 1962, 33 percent of the variance of their first jobs, and 26 percent of that of educational attainment. Among the direct effects on occupational achievement, the effect of educational attainment is the greatest (the path coefficient, p = .394), following is the first job (p = .281), and then the father's occupation (p = .115). Blau and Duncan conclude that "although most of the influence of social origins on occupational achievements is mediated by education and early experience, social origins have a continuing impact on career that is independent of the two variables pertaining to career preparation" (1967:403).

Figure 1.3.1. *Blau-Duncan Basic Model of Attainment*



Source : Blau and Duncan, 1967:170, Fig. 5.1.

Blau and Duncan extend their analysis by including additional variables into the basic model. They input some structural variables, such as race, region of birth, nativity, and types of community in which

one lives and works (1967:207-294). Some variables pertaining to family background are also injected into the model, for instance, number of siblings, sibling position, the relations among siblings, and the marital status of the sons. On the whole, Blau and Duncan have laid the groundwork for a new research tradition which is now commonly called *status attainment study.*

Before we end the explanation of the Blau-Duncan model, we should highlight one critique of the model as well as its defense, because this discourse is of great relevance to the present study. The critique claims that applying Duncan's socioeconomic index to the attainment model will bring spurious results. That is because Duncan's index, which is used to measure occupational achievement in the model, takes educational attainment as its major component; at the same time education is included as an independent variable in the regression equation which is used to predict occupational achievement. Therefore, the regression equation is itself a self-fulfilling prophecy, because a high correlation between occupation and education has already been built into the index (Blau & Duncan, 1967:124).

Blau and Duncan admit that "the criticism is germane, and the critics' point must somehow be met" (1967:124-125). They organize their defenses as follows

> The first response to the critics, then might be that the status score, interpreted as an estimate of occupational prestige, should legitimately reflect the fact that one determinant of an occupation's prestige is, in fact, the educational level of its incumbents. But because not all persons in an occupation have the same educational attainment, the formula for the status score does not by

> any means produce a perfect correlation between the estimated prestige of the individual's occupation and his educational attainment. On the other hand, in the light of our rather full knowledge of occupational prestige, no acceptable estimate of occupational prestige could fail to show some appreciable correlation between an individual's education and the prestige of the occupation in which he is engaged. It could be argued, in other words, that the apparent circularity of the procedure that was followed is simply a realistic reflection of the fact that high-prestige occupations do recruit men with superior education whereas low-prestige occupations recruit men with inferior schooling, by and large. (1967:125)

Empirically, Blau and Duncan replace the Duncan's socioeconomic index with another measurement of occupational prestige, which does not explicitly include an education component, in their attainment analysis. In comparing the results of the two analyses, they find a general similarity between them (1967:126-128; cf. Duncan & Hodge, 1963). In fact, Blau and Duncan's defense has been well received and no explicit refutation has ever been put forth.

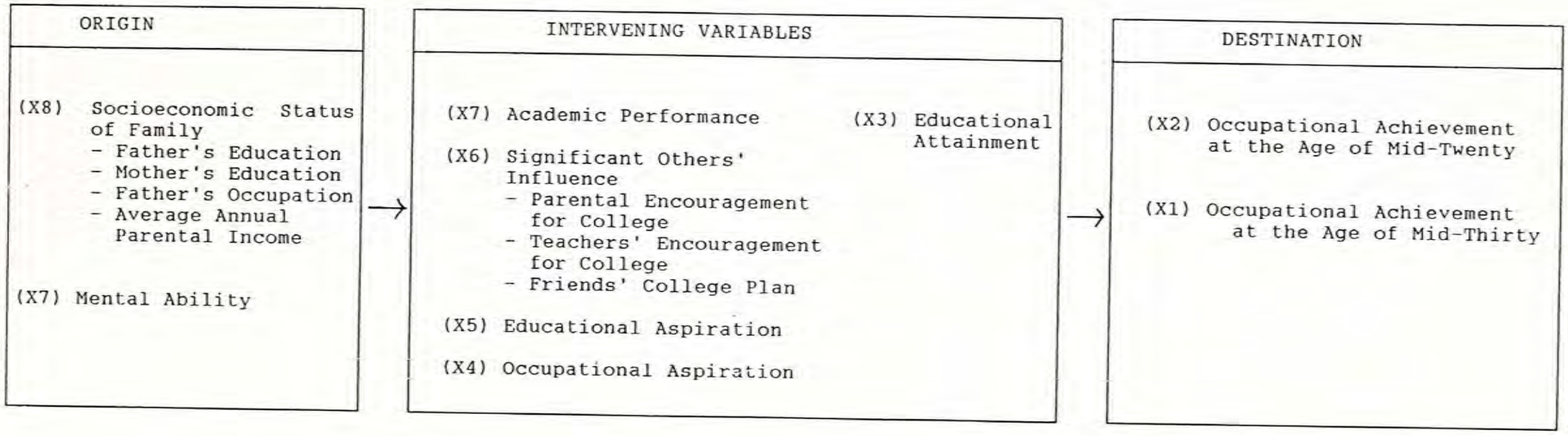
(b) ***The Wisconsin Model :***

Among the studies initiated by the Blau-Duncan model, the studies conducted by William Sewell and his colleagues in the University of Wisconsin have been widely regarded as the most influential because they have input some significant elaborations into the model. The contributions made by the Wisconsin model, as it is now commonly called, can be

summarized into two aspects. Methodologically, the Wisconsin model is basically a longitudinal study which consists of a series of follow-up studies at different points of time in the respondents' careers. Thus, the data collected are regarded as more reliable and valid than those collected in cross-sectional studies in which respondents are asked to recall information at different phases of their careers. Furthermore, since data are collected simultaneously with the respondents' career development, that makes it possible to introduce a set of socio-psychological variables into the model. As a result, the Blau-Duncan model has been conceptually expanded. The Wisconsin model is summarized in Diagram 1.3.2..

The initial study of the Wisconsin model was conducted in 1957 by J.K. Little, with the cooperation of the Wisconsin State Superintendent of Schools. The study covered almost all the high school seniors, both male and female, in the state of Wisconsin. The original objective of the study was "to obtain information that would be useful in the planning of statewide programs of higher education" (Sewell & Hauser, 1975:15-16). Thus, the study contained substantial information about the educational and occupational aspirations of the respondents. In 1962, the data was turned over to Sewell and a random sample of approximately one-third of the total respondents was drawn for further study. In 1964, seven years after the students graduated, a follow-up study was conducted by Sewell and his colleagues. The follow-up study , however, only contained the males in the random sample (Sewell et al, 1969; Sewell et al, 1970; Sewell & Hauser, 1975; and Sewell, Hauser, & Featherman, 1976). The second follow-up study was conducted in 1975. It contained approximately 90 percent of the one-third random sample, both males and females (Sewell, Hauser, & Wolf, 1980; and Clarridge et al., 1977), These studies have

Diagram 1.3.2. *The Wisconsin Model*



Source : Sewell et al., 1969; and Sewell et al., 1980.

presented a detailed picture of status attainment process of both males and females in the United States.

As for the results of the studies, take the 1975 study as an example; the model has been able to explain, for the male sample, 54 percent of the variance of educational attainment, 62 percent of that of early occupational achievement, and 47 percent of that of occupational achievement at the age of thirty-five (Sewell, Hauser, & Wolf, 1980:571). In comparison with the Blau-Duncan model, the Wisconsin model has significantly improved the predicting power on educational attainment but has not gained much on predicting the occupational achievement at middle age. Thus, it has been pointed out that the Wisconsin model is in essence a model of educational attainment and socialization rather than of occupational attainment (Kerckhoff, 1976 and 1984) because all it has input into the status attainment model is a set of variables which account for the outcome of education and socialization.

The Wisconsin model has triggered a number of similar longitudinal studies, for instance, the EEO (Explorations in Equality of Opportunity) survey (Alexender, Eckland, & Griffin, 1975; Alexender & Eckland, 1980) and the Project Talent survey (Jencks & Brown, 1975; Porter, 1974; Weis & Steel, 1980; and Jencks, 1983); and it still attracts considerable attention within the forum of the discipline (cf. Kerckhoff, 1980; and Sociology of Education, 1983).

(c) The Structural Models :

In the mid-1970s, the status attainment model met strong criticism, the first of which was launched by Lewis A. Coser in his Presidential Address at the Annual Meeting of the American Sociological

Association. In his speech entitled *Two Methods in Search of a Substance* (Coser, 1975), Coser takes issue with two research methods, one of which is path analysis, specifically its application to stratification studies. Coser quotes Blau and Duncan's work (1967) as an example and accuses the research tradition as "a hypertrophy of method at the expense of substantive theory." (1975:698) Such an accusation of being "atheoretical" has triggered heated debate, and has subsequently led to serious reflections on the theoretical bases of the research tradition (Burawoy, 1977; Crowder, 1974; Horan, 1978; Horan, Beck, & Tolbert, 1981; Colclough & Horan, 1983; and Knottnerus, 1987).

Horan and his colleagues, on several occasions, have pointed out that "status attainment is not atheoretical. Quite the contrary, it is heavily theory-laden" (Horan, 1978:534). Horan argues his case by underlining two aspects of the Blau-Duncan model which, he claims, reflect the underlying theoretical orientation of the model. First of all, Horan points to the Duncan's socioeconomic index, which is an essential building block of the model, and asserts that it basically reflects "the functionalist conception of a unidimensional, consensual evaluation of occupations" (Horan,1978: 536). To support his point, Horan contrasts Duncan's index with some functionalist classics, such as Parsons' article, "An Analytical Approach to the Theory of Social Stratification"; and the work of Davis and Moore, "Some Principles of Stratification" (Horan, 1978; cf. Crowder, 1974). Furthermore, Horan concludes that Duncan's index accords strikingly with functionalist conception and principles of stratification. Second, Horan points to the attainment process itself and claims that the process is built upon a functionalistic and neo-classical conception of occupational placement (1978:537; cf. Stolzenberg, 1975). He asserts that both the Blau-Duncan model and the Wisconsin model assume

that the status attainment process is "an open, fully competitive market process in which individual characteristics are identified and rewarded according to their societal value" (1978:537). Horan contends that the status attainment model is heavily laden with the functionalist and neo-classical conceptions of stratification. More recently, Knottnerus points to another more general theoretical conception underlying the status attainment model, that is, the implied overall image of society (1987). Knottnerus asserts that the image of society implied in the works of status attainment study is distinguished by features related to the core concept of universalism and achievement-orientation (1987:116). Knottnerus then describes in detail the social structure and action orientation within such a society (1987:116). In short, it is "an optimistic image of modern, mass, industrial society" typified by neoclassical and functionalist writings on stratification (1987:118).

All these discussions on the underlying theoretical orientation point to one basic pitfall in the status attainment model, that is, it totally ignores the structural constraints which bear upon individuals as well as their attainment opportunities (Bielby, 1981; Horan, 1978; Knottnerus,1987; Kerckhoff, 1976 & 1984; Stolzenberg, 1975). The model has been criticized for its assumption that the attainment process takes place in a vacuum which is completely insulated from the social, political, and economic context. It has also been criticized for attributing the attainment outcome entirely to individualistic and voluntaristic reasons.

Based upon these "astructural" critiques, Kerckhoff draws our attention to the fact that there could be two distinct approaches to status attainment study, which he named "the socialization model" and "the allocation model" (1976). By the socialization model, Kerckhoff refers to the model which sees status attainment as the outcome of socialization of

individuals. Thus the main task of the model is to look for "the explanation of attainments in the analysis of the evolving characteristics of individual actors." Such a model "tends to view the individual as relatively free to move within the social system, his attainment being determined by what he chooses to do and how well he does it" (1976:369). Apparently, both the Blau-Duncan model and the Wisconsin model belong to this model. On the other hand, the allocation model sees attainments as the result of a social allocation process through which individuals are identified, selected, processed, classified, and assigned according to externally imposed criteria (1976: 369). The primary objective of the approach is to investigate into the mechanism and criteria governing this allocation process and see how it constrains the attainment opportunities of some individuals or groups and at the same time enhances the chances of others. Hence, the model "views the individual as relatively constrained by the social structure, his attainments being determined by what he is permitted to do" (1976:369).

Since the mid-1970s, a stream of researches, based upon the allocation or structural perspective, have emerged within the research area of status attainment. All of them aim at investigating the structural constraints which bear upon individuals in their attainment process. One of the most apparent structural constraints in modern society is sex, which has attracted much attention and research effort. In fact, many scholars, including Sewell and Hauser, have tried to reveal the attainment differences between sexes and to see how being a female constrains a woman's opportunities in both educational and occupational attainment (Alexander & Eckland, 1974; McClendon, 1976; Sewell, Hauser, & Wolf, 1980; Treiman & Terrell, 1975; Wolf & Fligstein,1979). Another constraint that has been well researched, especially in U.S., is race.

The findings consenusally suggest that being black in U.S. will limit one's opportunities for educational and status attainment (Bonacich, 1976; Kluegel, 1978; Porter, 1974; Portes & Wilson, 1976). The third constraint explored by both sociologists and economists is the structure of the labor market. This branch of research aims to find out how segmentation and differentiation of labor markets affect the attainment opportunities (Beck et al., 1978; Bibb & Form, 1977; Stolzenberg, 1975; Tolbert et al., 1980; Wallace & Kalleberg, 1981). More specifically, some scholars even go into the organizational level and investigate how organizational factors, such as the authority structure, organizational size, and organization of work, constrain individual attainment (Baron & Biely, 1980; Stolzenberg, 1978; Wallace & Kalleberg, 1981; Wolf & Fligstein, 1979).

Apart from the structural or allocation model, there is still another research approach emerging from the debate over the theoretical foundations of status attainment study, that is the Marxist approach. The main difference between the structural model and the Marxist approach is that the former simply pinpoints the structural aspect of the attainment process which the Blau-Duncan model has neglected, while the latter challenges the basic conception of the social hierarchy within which the attainment process takes place. Therefore, the Marxist challenge is relatively more profound than the structural model.

As explicated in the previous section; Wright, with reference to the Marxist conception of class, launches his critique of Duncan's socioeconomic index in particular and the Blau-Duncan attainment model in general. He argues that the Marxist conception of class can explain more adequately the income inequality in advance capitalism than the Blau-Duncan Model (Wright, 1979; Wright & Perrone, 1977; and Wright, 1978b).

Kalieberg and Griffin further Wright's argument by extending the dependent variable from income inequality to inequality in job rewards, which includes both economic success and fulfillment. Their conclusion is similar to Wright's, which states that Duncan's index has proved to be relatively less adequate (1985).

Since Coser's critique (1975), the study of status attainment has undergone a profound revision and development both theoretically and methodologically. The theoretical scope of the study has substantially been enlarged. The studies of status attainment are no longer confined to the analytical level of individual socialization, but have been extended to both organizational and structural levels. Thus the research tradition as a whole has grown into a saturated theory of status attainment. At the same time, with the expansion of the theoretical scope, new concepts and variables are coined and input into the model. Thus, they have initiated a large number of researches which have enhanced our understanding to the status attainment process substantially. As for the Marxist critique, I think it represents the basic difference between Weberian and Marxist theories of class. In my opinion, the Marxist efforts on attainment study have only offered us an alternative rather than a substitute approach to attainment study.

In this section, I have outlined the development of the regression tradition in social mobility study. First, we looked into the works of Blau and Duncan and then the studies commonly called the Wisconsin model. Secondly, we went through the discussions, initiated by Coser, on the theoretical orientation of the area. Thirdly, we examined a collection of researches on the structural and organizational constraints on attainment process. Finally, we briefly touched upon the Marxist works on status attainment.

4. THE SHOULDER OF A GIANT --- A SUMMARY

In 1949 Robert K. Merton proclaimed, "Between twentieth-century physics and twentieth-century sociology stand billions of man-hours of sustained, disciplined, and cumulative research. Perhaps sociology is not yet ready for its Einstein because it has not yet found its Kepler --- to say nothing of its Newton, Laplace, Gibbs, Maxwell or Plank" (1949:47). About three decades later, Anthony Giddens wrote, "A sort of yearning for the arrival of a social-scientific Newton remains common enough, even if today there are perhaps many more who are skeptical of such a possibility than still cherish such a hope. But those who still wait for a Newton are not only waiting for a train that won't arrive, they're in the wrong station altogether" (1976:13).

I do not intend to join in the famous debate whether sociology, in essence, is or will be a science. But I do want to underline that in light of "the sustained, disciplined, and cumulative researches" built up in the area of social class and mobility study in recent decades, a portion of which I have reviewed above; the research area has in all respect grown up into a field of study in its own right or, metaphorically speaking, a giant who can stand firmly on its own feet. However, I tend to agree with Giddens' assertion that it makes no sense to compare the giants in social science with the one whose shoulders Newton said to have stood on. I think what is essential is whether the shoulders of the giant can really enable us to ascend ourselves from our own social milieu and to reveal the social mechanism at work in our society. In my opinion, the giant built up in the research area of social class and mobility can certainly meet with the challenge. Hence, let us recapitulate some of the

theories and researches which have constituted part of the flesh and bones of this giant.

In the foregone review, I began with the three perspectives on the definition of social class, namely the gradational, market-relational, and production-relational perspectives. In reviewing the gradational perspective, three approaches in measuring socioeconomic status of occupations were introduced. They are the occupational prestige approach, the Duncan's socioeconomic index, and the Nam-Powers occupational status index. In the explication of the market-relational perspective, Weberians' conceptions of economic and social classes were presented. In the review of the production-relational perspective, Marxists' conception of social class was elucidated. Subsequently, the gradational perspective was integrated into Weberians' conception of class by attributing the gradational perspective as a measure of the concept economic class.

In section two of the chapter, a major approach in social mobility study was reviewed, namely the mobility table analysis. First of all, the studies on the propositions of social mobility in industrialized society were explicated. The various mathematical measures of social mobility derived from these studies were also presented. Then, the propositions of social mobility in open society were elucidated. The various models for examining the social fluidity and openness of a society were also introduced. Finally, Duncan's and Breiger's critiques on the basic assumption and theoretical orientation of mobility table analysis were reviewed. Based on Duncan's critique, it is suggested that mobility table study should be confined to the origin-destination interpretation. Following Breiger's critique, the major concern of the study was then to locate the social closures implied in the mobility table, in other words, to serve as a measure of Weber's concept of social class.

In section three, another approach in social mobility study was reviewed, that is, the regression approach. Various status attainment models were explicated, including the Blau-Duncan model, the Wisconsin model, and a variety of structural models.

These works of prominent sociologists have offered us a clear guideline for future study on social class and mobility. On one hand, they have constructed various measures of economic and social classes by means of which we could reveal the class structure working implicitly in our society. On the other hand, they have also worked out various analytical models to investigate how individuals move among the various class positions prevailing in a given social structure. With the assistance of these models, we would be able to unfold the social mechanism governing the ladder of success in our society. It is on the shoulders of such a giant that I will investigate the class structure and social mobility mechanism prevailing in Hong Kong society.

CHAPTER 2

THE STUDY

In light of the theories and researches on social class and mobility reviewed in the previous chapter, we can proceed to explain the nature of the present study. In this chapter, we will first outline the theoretical framework upon which the study is based. Then we will characterize the socioeconomic context of Hong Kong within which the data under study are drawn. Thirdly, we will explicate the hypotheses which are to be verified in the present study. Finally, we will describe the data sets to be used in the study and we will also validate the external validity of these data sets.

1. THE THEORETICAL FRAMEWORK: A WEBERAIN APPROACH TO CLASS STRUCTURE AND SOCIAL MOBILITY

In the previous chapter, I have reviewed some of the major theories and researches on occupational hierarchy, class structure and social mobility. From the works reviewed, we can clearly identify two lines of theoretical perspective which thread through the corpus. They are the Marxist and the Weberian perspectives. The present study, however, will be based mainly on the Weberian perspective. Such a choice of theoretical perspective, though partly due to personal discretion, is

mainly based on the fact that the Weberian perspective is much more well researched and developed than the Marxist in the area of social mobility.

The underdevelopment of the social mobility study within the Marxist tradition, as aptly documented by Goldthorpe (1987:1-36), is due to the fact that the social mobility thesis is in fundamental contradiction to the overall theory of social class and the theory of social change within Marxism. For classical Marxism, Goldthorpe points out that

> Marxism attached little importance to social mobility... Mobility is given a prominent part in the analysis of capitalism only as an aspect of the Verelendungstheorie, in which it is envisaged that with the growth of the capitalist economy, peasants, small entrepreneurs, artisans, and the like will be increasingly forced downwards into rank of the proletariat. As a form of socialist doctrine, Marxism dismissed the possibility of upward movement from the working class as merely a liberal myth : in fact, the chances of such ascent were negligible and irrelevant---the only form of advancement to which members of the working class could realistically aspire was that of collect advancement to be gained through the labour movement, class struggle and, ultimately, revolution. (1987:4)

As for the Neo-Marxists, their responses to mobility study do not differ much from their antecessor. Again, Goldthorpe points out that

> The Marxist response to the growing volume of mobility research over recent decades has not in fact gone further than the charge of ideological bias : that is to say, there

has been a refusal to respond intellectually to this research other than by trying to explain or situate it as an activity reflecting the class attachments of those engaged in it. ... Two further essentially defensive and unfruitful reactions are also to be noted. First, it has been argued that the Marxist concern is with class structure in the sense of a structure of positions constituted by the prevailing relations of production, and that from this standpoint the question of distribution of individuals among these positions is of quite minor significance. ...Secondly, it has been contended that, whatever status may be given to mobility theoretically, it can be of little actual consequence for class relations and the class struggle : this is because mobility across the fundamental line of class division within capitalist society---that between the major owners of the means of production and the mass of employees---is held down, by the very nature of the transmission of capital, to so low a level as to be quite negligible in its effects (1987:24).

Contrary to the Marxists' negative attitude towards mobility study, the Weberian contributions to mobility study is substantial and sustaining. I will argue in this section that with reference to the Weberian theory of class and class structuration, we can integrate most of the works reviewed in Chapter One, ranging from socioeconomic index constructions to status attainment modeling, into a coherent theoretical framework.

(a) Locating the Theoretical Footing of the Study :

To start with, it is helpful to highlight how the Weberians relate the theory of class to the general theory of stratification and domination. This will not only help us to locate the theoretical footing of the present study, but also to provide us with a more complete picture of the Weberian theory of class.

Classes, status groups, and parties have commonly been regarded as the three basic constituent parts of the Weberian theory of stratification and domination. Weber contends that "classes, status groups, and parties are phenomena of the distribution of power within a community" (Weber, 1969:181). According to Weber, the ways in which power is distributed within a community constitute three fundamental orders in a community (Weber, 1969:180-181). They are the economic, social, and political orders. Social order refers to "the way in which social honor is distributed in a community between typical groups participating in this distribution", while "economic order is...the way in which economic goods and services are distributed and used" (Weber, 1969:181). By the same token, political order is the way in which social power is distributed (Weber, 1969:194). Within each of these orders or spheres of distribution, different "typical groupings" are formed. Within the economic order or the markets of economic goods and services, classes are formed; within the social order, status groups or circles of "specific style of life" are constituted (Weber, 1969:187); and within the political order, parties are organized and contest with each other mainly within the "state" (Weber, 1969:194). Furthermore, according to the results of the distribution in each sphere, the typical groupings of each order are stratified into the dominants and subordinates or the positively and negatively privileged

(Weber, 1969:187-188 & 1978:303-305).

Weber further points out that though classes, status groups, and parties are analytically distinct, in reality they are, in most cases, inter-related to each other. For example,

> class distinctions are linked in most varied ways with status distinctions. Property as such is not always recognized as a status qualification, but in the long run it is, and with extraordinary regularity. (Weber, 1969:187)

Weber also points

> parties may represent interests determined through *class situation* or *status situation*, and they may recruit their following respectively from one or the other. But they need be neither purely class nor purely status parties. In most cases they are partly class parties and partly status parties. (Weber, 1969:194)

Thus, we can see that Weber's theory of class constitute only part of his theory of stratification and domination. Classes are only one type of human grouping, which are typically formed and operate within the economic order and the sphere of distribution of economic goods and services---i.e. the market. Accordingly, the present study will confine to analyze only the typical groupings, i.e. classes, found in the economic order of Hong Kong.

Even within Weber's theory of class, a number of scholars have underlined that a distinction between the concept of *class situation* and *class action* is of vital importance in understanding the theory (Cox, 1950; Jones, 1975; Weber, 1969:181-186; and Wenger, 1987). Class situation refers to the objective situation a class occupied within a

given economic order, while class action refers to the "communal action" taken by members of a class whom are motivated by the subjective class interest derived from a particular class situation (Weber, 1969:184). By communal action, Weber means "action which is oriented to the feeling of the actors that they belong together" (Weber, 1969:183). However, Weber points out that "the rise of ...communal action from a common class situation is by no means a universal phenomenon" (1969:183). In order for class action to emerge out of a given class situation,

> the fact of being conditioned and the result of the class situation must be distinctly recognizable. For only then the contrast of life chances can be felt not as an absolutely given fact to be accepted, but as a resultant from either (1) the given distribution of property, or (2) the structure of the concrete economic order. It is only then that people may react against the class structure not only through acts of an intermittent and irrational protest, but in the form of rational association. (Weber, 1969: 184)

In other words, common class situations are by no means a necessary and sufficient condition for the formation of class action, they "merely represent possible, and frequent, base for communal action" (Weber, 1969:181). In light of such a conceptual distinction, it must be pointed out that the present study will only focus on analyzing the objective class situations prevailing in Hong Kong society and will not explore any of the subjective class interests and/or class actions that may have derived from these class situations.

Having identified the theoretical footing of the present study, we can now go on explaining in greater detail the Weberian conception of

class situation. From Chapter One, we know that the Weberian conception of class situation can be broken down into two sub-divisions, namely the economic class situation and the social class situation. Thus, in the discussion that follows, we will first explicate the conceptualization of the economic-class situation. Then, the conceptualization of the social-class situation will be examined. Finally, we will explain how these class situations are distributed within the economic order of a given society.

(b) Economic Class and the Measures of Socioeconomic Status :

The review in Chapter One has shown that the Weberians define economic class as a group of individuals sharing a common life chances in labor and commodity markets, in other words, sharing a common market situation. The differentiation or even stratification of market situations depends mainly on the market capacities that each economic class can bring to the bargaining encounter in markets. Within the capitalistic economic order, market capacities are primarily determined by the possession of property and/or educational credentials. Thus, it is suggested that the market capacities of economic classes can be measured by the income generated from and the educational qualifications required by the performance of particular occupational roles.

On the other hand, theorists of the gradational perspective, have constructed various socioeconomic indexes to measure occupational statuses, for example the Duncan's Socioeconomic Index and the Nam-Powers Occupational Status Scores, which have been reviewed in Chapter One. These measures use occupational title as indicator and the corresponding educational and income levels as predictors (Duncan, 1961; and Nam &

Powers, 1983). As explicated in Chapter One, these theorists have explicitly relate their measures to Weber's concept of economic class and market situation (Duncan, 1961:116-117; Blau & Duncan, 1967:6-7; Goldthorpe, 1987:40; and Marshall et al., 1988:21-23). In fact, similar suggestions can also be found among the Weberians (Giddens, 1981:103; and Collins, 1975:61-62).

However, it has been pointed out in Chapter One that, in Weber's conception, economic class is sub-divided into two categories, namely property class and commercial class. The former indicates "the property differences", while the latter characterizes "the marketability of goods and services" (Weber, 1978:303-305). In other words, Weber tries to delineate two kinds of class situations, one of which is based on ownership of property, such as land and capital; while the other is based on marketability of goods, skills and services. In light of this classification, we can see that Duncan and Nam and Powers have apparently not given enough weight to ownership of property in constructing their indices. In fact, this oversight has been one of the major sources of criticism, especially by the Marxists who insist that ownership of capital is the primary criterion for class demarcation (Wright, 1979; and Wright & Perrone, 1977). Taking into consideration both Weber's distinction between property and commercial class and Marxist criticism, a number of theorists of the gradational perspective have suggested that measures of economic-class situation should include ownership of property, especially of capital, as one of the components. For example, Goldthorpe and Hope, in constructing their occupational grading scale, have included "employment status" as one of the indicators. It is contended that "employers", one of the sub-categories of "employment status", can be taken as a measure of ownership of capital (Goldthorpe and Hope, 1974:24).

Taken together, it has been suggested that measures of socioeconomic status, which use occupational titles and employment statuses as indicators, and corresponding educational and income levels as predictors, can be taken as the operationalized measure of the Weberian conception of economic-class situation. In this study, we will take this suggestion as the theoretical postulate for the analysis of the economic-class situations and occupational hierarchy in Hong Kong.

(c) Social Class and the Study of Social Mobility :

As reviewed in Chapter One, the Weberians define social class as a cluster of economic classes which takes the form of a social closure, within this social closure, opportunities for both inter- and intra-generation social mobilities are easy and typical. Based on this conception, Giddens coined the term *class structuration* which refers to the "process whereby economic classes become social classes" (Giddens, 1981:105). Accordingly, the result of class structuration will be the emergence of a social class structure within which there are only a limited number of mobility closures.

On the other hand, mobility analysts, such as Goldthorpe, Breiger, and Marshall et al., whose works have been reviewed in Chapter One, have related their works on social mobility to the Weberian conception of social class and class structuration (Breiger, 1981; Goldthorpe, 1987; and Marshall et al., 1988). They point out that the Weberian conception can serve as the theoretical foundation for social mobility analysis and suggest that the objective of mobility study should be re-defined as to search for the structure of social class and to reveal the process of class structuration. Conversely speaking, these

researchers also contend that the various statistical measures derived from social mobility analyses, especially those modeling techniques derived from mobility-table analyses, can be taken as the operationalized measures of the concept social class and class structuration.

In light of all these, it has been contended that the statistical techniques in mobility-table modeling can be taken as operationalized measures of mobility closures and social classes. In this study, we will take this contention as the theoretical postulate for the analysis of social-class situations in Hong Kong.

(d) Class Situation and the Study of Status Attainment :

Having accepted *Duncan's Socioeconomic Index* as measure of economic-class situations, we can then interpret the conventional status attainment model, which is built upon *Duncan's Index*, as the model accounting for the individual variations in market situations. In other words, what is suggested is to locate the works of attainment study within the Weberian theory of class. In light of the Weberian conception of market situation and capacity, the debates between the socialization and structural models within the attainment study, which have been reviewed in Chapter One, can then be integrated neatly into one coherent theoretical framework.

First, the educational attainments and socialization outcomes emphasized in the socialization model can be interpreted, within the Weberian conception, as relevant attributes which individuals bring to the bargaining encounter in the labor market as forms of market capacities. In fact, such an interpretation has been well documented within the Weberian tradition. For instance, Weber himself asserts that as education and

training are rationalized, educational qualifications and credentials will become the major criteria in social selection and serve as the legitimate basis for the monopolization of privilege and authority in modern society (Weber, 1969:240-244). This thesis has been elaborated in greater detail in the context of modern U.S. society by Collins in his work, *The Credential Society* (1979). Secondly, in light of the Weberian concept of market capacity, we can also interpret sex and race, the two structural constraints emphasized in the structural model, as another two forms of market capacities which individuals bring with them to the labor market encounter. Finally, as for the differences in the attainment opportunities among different market segments and work organizations, which have been highlighted in the structural model, they can again be construed as differences in definition and valuation of market capacities among different market segments and work organizations.

Taken together, with reference to the Weberian concepts of market situation and capacity, the socialization outcomes emphasized in the socialization models and the structural constraints put forth by the structural approach are in fact two sides of the same coin. On one hand, educational credentials, family socialization outcomes, sex, race, and all other individual attributes can be interpreted as market capacities that individuals bring to the bargaining encounter in the labor market; but on the other hand, whether these attributes will be rewarded or penalized will be determined by the overall definition and valuation prevailing in the market structure as a whole or in different segments of the market. In this study, we will take this interpretation of the status attainment model as the theoretical postulate for the analysis of the status attainment path in the class structure of Hong Kong.

To summarize, the theoretical framework upon which the present study is based is the Weberian theory of stratification in general and conception of class situation in particular. Within the conceptual framework of class situation, we have further formulated three theoretical postulates upon which the analyses of the study will be based. They are

(1) Measures of socioeconomic status using occupational titles and employment statuses as indicators, and corresponding educational and income levels as predictors, can be taken as the operationalized measures of the Weberian conception of economic-class situation.

(2) The modeling techniques in mobility-table analysis can be used as operationalized measures of the Weberian conception of social class and class structuration.

(3) The status attainment model can be interpreted as a model accounting for individuals' variations in market situations. On one hand, individuals' attributes, such as educational credentials, family socialization outcomes, sex, race, etc., can be interpreted as market capacities that individuals bring to the bargaining encounter in the labor market. On the other hand, it is the overall definition and valuation of these attributes by the market or segments of the market that will determine the market situations of individuals.

2. THE HONG KONG CONTEXT

Having identified the theoretical framework of the study, we can proceed to explicate the empirical context within which the present study

is to be carried out. As pointed out in the Prologue, the data sets used in the study are samples from the 1981 census data. Therefore, the present study can be viewed as a cross-sectional study of Hong Kong society in 1981. Furthermore, as made explicit in the discussion of the theoretical framework, the present study is to analyze, in Weberian terms, the class situations prevailing in the economic order of Hong Kong. Hence, the empirical context of the present study is the economic order of Hong Kong in the late 70's and early 80's. In this section, we will first outline the history of economic development of Hong Kong since the Second World War. Then, we will look specifically into the differentials in three of the major components of class situations, namely, the occupational structure, the income distribution, and the overall educational attainment level of Hong Kong society.

(a) An Outline of the Economic History of Hong Kong :

The prosperity that Hong Kong witnessed in the 80's was the result of decades of economic development. It all began when the Second World War ended.

In 1945, there were only 600,000 inhabitants (Census & Statistics Dept., 1971a:10) and hardly any industrial establishments in the war-torn colony (Brown, 1971:1-2; Szczepanik, 1958:3). It was the influx of immigrants from China after the war, which was the major driving force for her development. In fact, the flow of immigrants from China has never stopped and this can be evidenced by the substantial differences between the rate of natural increase and the rate of population growth in Hong Kong over the years, which are presented in Table 2.2.1.. From the Table, we can see that the waves of immigrants were particularly significant in

1946, 1947, and 1950. Furthermore, evidence of the influx of immigrants from China can also be found in the 1961 census data. The data reveal that 52.3% of the population then had not been born in Hong Kong. Among them, 96% were born in China (Census & Statistics Dept., 1969:22, Tab.2.11) and 73% came to Hong Kong after the war (Podmore, 1971:38, Tab.2.9). These immigrants had provided the colony with a reservoir of hard-working labor which was proved to be a valuable asset for the economic development which was then yet to come.

TABLE 2.2.1. Population Growth in Hong Kong, 1945-1986

YEAR	TOTAL POPULATION	AVERAGE ANNUAL NATURAL INCREASE %	AVERAGE ANNUAL POPULATION GROWTH %
1945	600 000	-	-
1946	1 550 000	0.9	158.3
1947	1 750 000	1.7	12.9
1948	1 800 000	1.9	2.9
1949	1 857 000	2.1	3.2
1950	2 237 000	1.9	20.5
1951	2 015 300	2.4	-9.9
1952	2 125 900	2.5	5.5
1953	2 242 200	2.6	5.5
1954	2 364 900	2.7	5.5
1955	2 490 400	2.9	5.3
1961	3 174 700	2.9	3.6
1966	3 732 400	2.4	3.3
1971	4 045 300	1.6	2.2
1976	4 402 990	1.9	2.1
1981	4 986 560	1.2	2.8
1986	5 395 997	1.0	1.6

Sources: Census & Statistics Dept., 1969:40, Tab.3.3; 1971:9, Tab.3.2.1; 1976:20. Tab.3.2 & 3.3; 1986:15, Tab.2; 1987:1, Tab1.2.

Among the immigrants, there was a group of manufacturers who fled from Shanghai to find haven from both the civil war, which broke out immediately after the War, and the Communist regime, which came to power in 1949. They brought along not only capital but also technical and

managerial know-how, which had constituted another essential pre-condition for the industrial development in the 50's. It is estimated that in the late 40's and early 50's the inflow of capital from China amounted to HK$ 500 million per annum (Szczepanik, 1958:142-3). As Sir Alexander Grantham, the Hong Kong Governor at that time, put it, "It was the Shanghai-Chinese businessmen, with their capital and industrial know-how, who were largely the economic salvation of Hong Kong" (Quoted from Brown, 1971:8; see also Geiger & Geiger, 1973:69; Szczepanik, 1958:5-6).

Though Hong Kong had had all the favorable pre-conditions for industrial development, i.e. labor, capital, and entrepreneurship, the impulse which really pushed her onto the road of industrial development was the erosion of her status as an entrepôt of China trade, which she had relied on for her livelihood ever since she became a British colony. There were a number a factors which had contributed to the decline of re-exports to China. "First the Communist seizure of the control in China upset the accustomed course of trade; then, during the Korean War, the U.S.A. imposed an embargo on the import of all goods of Chinese origin, and the United Nations an embargo on the export of strategic goods to China" (Brown, 1971:2; see also Geiger & Geiger, 1973:68; Riedel, 1974:6-7).

With the ever increasing population and the rapid decline of the China trade, Hong Kong had to find herself another means of living. The only possible way-out was industrial development. Since then, manufacturing has grown into the most vital sector to the Hong Kong economy. As evidenced on Table 2.2.2 and 2.2.3, the manufacturing sector has, on one hand, employed the largest portion of the Hong Kong labor force; and on the other, it has contributed more than one-fifth of the gross domestic product (GDP) at factor cost since the 60's.

TABLE 2.2.2. Working Population by Industry

No. of persons (%)

INDUSTRY	1961	1971	1976	1981	1986
Agriculture & fishing	86 950 (7.3)	60 330 (3.9)	47 570 (2.6)	47 004 (2.0)	47 702 (1.8)
Mining & quarrying	8 338 (0.7)	4 641 (0.3)	1 020 (0.1)	1 556 (0.1)	812 *
Manufacturing	512 173 (43.0)	727 054 (47.0)	829 240 (44.8)	990 365 (41.3)	946 653 (35.8)
Electricity, gas & water	13 102 (1.1)	9 282 (0.6)	9 710 (0.5)	14 669 (0.6)	17 724 (0.7)
Construction	58 364 (4.9)	83 534 (5.4)	103 670 (5.6)	185 999 (7.7)	164 268 (6.2)
Wholesales & retail trade, restaurant & hotel	171 518 (14.4)	250 602 (16.2)	359 900 (19.5)	461 489 (19.2)	589 918 (22.3)
Transport, storage, & communication	86 950 (7.3)	114 472 (7.4)	135 970 (7.4)	181 368 (7.5)	210 367 (8.0)
Financing, insurance, real estate, & business services	19 058 (1.6)	41 767 (2.7)	62 050 (3.4)	115 870 (4.8)	169 967 (6.4)
Services	217 971 (18.3)	232 039 (15.0)	284 460 (15.4)	375 703 (15.6)	486 167 (18.4)
Unclassifiable	16 675 (1.4)	23 204 (1.5)	13 220 (0.7)	30 044 (1.2)	9 695 (0.4)
Total	1 191 099 (100.0)	1 546 924 (100.0)	1 846 810 (100.0)	2 404 067 (100.0)	2 643 273 (100.0)

Source : Census & Statistics Dept., 1976:63, Tab.6.8; 1986:38, Tab.33.
* less than 0.05%

TABLE 2.2.3. Contribution of Economic Sectors to the Gross Domestic Product at Current Factor Cost

$ thousand million
(%)

INDUSTRY	1971	1976	1981	1986
Agriculture & fishing	0.40 (1.9)	0.79 (1.6)	1.11 (0.7)	1.33 (0.5)
Mining & quarrying	0.04 (0.2)	0.05 (0.1)	0.25 (0.2)	0.35 (0.1)
Manufacturing	6.06 (29.3)	13.58 (27.4)	36.05 (22.8)	62.78 (22.3)
Electricity, gas & water	0.37 (1.8)	0.89 (1.8)	2.23 (1.4)	8.39 (3.0)
Construction	0.75 (3.6)	2.03 (4.1)	11.92 (7.5)	13.56 (4.8)
Wholesales & retail trade, restaurant & hotel	4.37 (21.1)	11.80 (23.8)	30.75 (19.5)	59.89 (21.3)
Transport, storage, & communication	1.30 (6.3)	3.02 (6.1)	11.85 (7.5)	22.90 (8.1)
Financing, insurance, real estate, & business services	3.70 (17.9)	9.32 (18.8)	37.69 (23.8)	48.59 (17.3)
Community, social & personal services	3.58 (17.3)	7.89 (15.9)	21.07 (13.3)	46.78 (16.6)
Ownership of premises	N.A.	N.A.	15.48 (9.8)	30.05 (10.7)
Nominal sector (adjustment for financial services)	N.A.	N.A.	-10.33 (-6.5)	-13.08 (-4.7)
GDP at factor cost	20.69 (100.0)	49.57 (100.0)	158.09 (100.0)	281.52 (100.0)

Source : Census & Statistics Dept., 1982:27, Tab4.1; 1987:22, Tab.3.4; 1990:22, Tab.3.4;
The Advisory Committee on Diversification 1979, Annex(15).

Besides the manufacturing sector, the services sector, especially the sales and the financing services, have also made substantial contributions to the overall performance of the economy. The contributions have become much more essential since the 80's. As shown on Table 2.2.3, the sales and financing service sectors together have contributed more than one-third of the GDP at factor cost since the 80's. This is mainly due to China's open-door policy, which has helped Hong Kong to re-establish her status as entrepôt of China, and the maturation of Hong Kong's status as an international financial center.

Taken together, Hong Kong has developed from the ruins of the war into an internationally acclaimed industrial and financial center.

(b) Differentials in Market Situations :

In light of the general economic situation of Hong Kong discussed in the previous section, we can now proceed to discuss the differentials in market and class situations among occupational groupings in the economy. More specifically, we will analyze the differentials in income and educational attainment levels within the occupational structure of Hong Kong.

Along with the rapid economic growth in the last four decades, the occupational structure of Hong Kong has undergone significant changes. From Table 2.2.4., we can see that the overall working population has grown substantially, increasing 101.8% from 1961 to 1981. Breaking down the increase into occupational categories, we can see that the "the clerical and related workers" category experienced the relatively largest increase in incumbents. Its incumbents had increased 325.4% from 1961 to 1981, which exceeded the growth rate of the overall working population by

nearly three-fold. The occupational category which had the second largest growth rate from 1961 to 1981 was the "professional, technical and related workers" category. Its growth rate was 136.6%, which also exceeded the overall growth rate. The other two sectors which had excessive growth rates were the production and operative workers and the service workers. Their growth rates were 109% and 108% respectively. The only sector that experienced a decrease of incumbents between 1961 and 1981 was that of agricultural workers and fishermen.

Table 2.2.4. Working Population by Occupation

No. of persons (%)

OCCUPATION	1961	1971	1976	1981	1986
Professional, technical & related workers	60 746 (5.1)	80 440 (5.2)	101 930 (5.5)	143 700 (6.0)	220 528 (8.3)
Administrative, & managerial workers	36 924 (3.1)	37 126 (2.4)	39 930 (2.2)	64 106 (2.7)	95 417 (3.6)
Clerical & related workers	69 084 (5.8)	128 395 (8.3)	179 780 (9.7)	293 905 (12.2)	385 587 (14.6)
Sales workers	163 084 (13.7)	163 974 (10.6)	213 350 (11.5)	247 924 (10.3)	309 059 (11.7)
Service workers	179 856 (15.1)	228 945 (14.8)	274 600 (14.9)	374 093 (15.6)	429 389 (16.2)
Production & operative workers & labourers	580 065 (48.7)	809 041 (52.3)	963 230 (52.1)	1 212 545 (50.4)	1 143 280 (43.3)
Agricultural workers & fishermen	88 141 (1.1)	58 783 (2.6)	49 000 (1.4)	50 676 (0.7)	50 150 (0.4)
Armed forces & unclassified	13 102 (1.1)	40 220 (2.6)	24 990 (1.4)	17 118 (0.7)	9 863 (0.4)
Total	1 191 099 (100.0)	1 546 924 (100.0)	1 846 810 (100.0)	2 404 067 (100.0)	2 643 273 (100.0)

Source : Census & Statistics Dept., 1981:34, Tab.2.11; 1986:38, Tab.34.

To summarize, the occupational structure in Hong Kong had undergone significant changes in the last four decades. First, there was a substantial increase in the overall working population. Secondly, the most substantial growth was among non-manual labourers, that is the clerical workers and the professionals. Thirdly, the growth rate among manual labourers was more or less in pace with the the overall increase. Finally, if we ranked the occupational categories according to the conventional non-manual and manual distinction, which will be discussed in great detail in Chapter Four (cf. Table 4.1.1. and 4.1.3.), we can see that there was a substantial increase in opportunities for upward mobility in Hong Kong over the decades. Thus, we can assume that the magnitude of structural mobility, which, as indicated in Chapter One refers to the social mobility induced by the changes in the occupational structure, would be quite substantial. is to be carried out.

Apart from the changes in occupational structure, another essential component of market and class situations, that is the educational levels of the working population, has also undergone significant changes in Hong Kong for the last four decades. As indicated in Table 2.2.5., the educational attainment of the Hong Kong labor force improved substantially from the 60's to the 80's. The improvement is indicated by the decrease in the proportion of workers having only primary education or below and by the increase in the proportion of workers who had attained secondary education or above. However, if we cross-tabulate the educational attainment levels with the occupational categories, we can see that the improvement on education is by no means universal across all occupations. For example, the data of the 1981 census reveals that there were apparent differentials in educational levels among occupation categories. From Table 2.2.6., we can see that more than one-fourth of

the professionals and managerial workers held university degrees and more than half of them had received some form of post-secondary education. On the other extreme, the majority of the manual labourers had not attained education beyond primary level. Between the two extremes lay the clerical and sales workers. Most of the clerical worker, i.e. 72.9%, were upper-secondary school graduates, while half the sales workers had attained secondary education or above. Therefore, in terms of educational credentials, we can postulate that there were clear differentials in market situations among occupations in Hong Kong.

Table 2.2.5. Working Population by Educational Attainment

OCCUPATION	1961	1971	1981	1986
	%	%	%	%
No schooling/kindergarten/ private tutor	23.10	21.67	10.84	8.10
Primary	47.97	45.91	37.05	29.17
Secondary	24.36	27.55	44.43	53.88
Tertiary: non-degree courses	1.49	2.37	3.77	3.50
Tertiary: degree courses	3.08	2.50	3.93	5.33
Total	100.00	100.00	100.00	100.00

Source : Census & Statistics Dept., 1961:25, Tab.236; 1971:98-100, Tab.26; 1981a:69, Tab.c7; 1986a:53, Tab.c7

Table 2.2.6. Working Population by Occupation and Educational Attainment, 1981

Occupation	No schooling/ kindergarten	Primary	Lower secondary	Upper secondary	Tertiary (non-degree)	Tertiary (degree)	Total
	%	%	%	%	%	%	%
Professional, technical & related workers	0.23	2.48	3.98	35.03	28.95	29.32	100.00
Administrative, & managerial workers	0.00	15.07	11.83	43.39	9.76	27.02	100.00
Clerical & related workers	0.10	5.60	10.42	72.90	6.68	4.41	100.00
Sales workers	12.80	37.16	17.86	26.62	2.10	3.45	100.00
Service workers	19.97	43.04	18.02	17.05	0.89	1.03	100.00
Production & operative workers & labourers	10.48	48.09	24.42	15.00	1.21	0.83	100.00
Agricultural workers & fishermen	46.89	40.65	6.66	4.70	0.44	0.66	100.00
Armed forces & unclassified	8.87	28.65	21.26	32.35	4.75	4.11	100.00

Source : Census & Statistics Dept., 1981a:69, Tab.c7.

Income level, another component of market and class situations, had also changed with the economic growth of Hong Kong. It is evident that the overall income level of the population had increased substantially. The increase can first be evidenced by the average annual growth rate of the real GDP per capita from 1960 to 1980, which was 7.03%. It certainly was a substantial increase in all standards (Lin, 1985:78, Tab.1). Secondly, changes in the median income of households during the 70's also indicated the general increase of income level in Hong Kong. The median of monthly household income (at 1981 prices) had changed from HK$ 1,600 in 1971 to HK$ 2,132 in 1976, and then to HK$ 2,955 in 1981 (Census & Statistics Dept., 1981:37, Tab 2.16). In light of this general increase in income level, we may want to know whether the equality of income distribution had also been improved. Unfortunately, it had been proven not to be the case. The Gini coefficients of the household income of Hong Kong in the 70's indicated that inequality of income distribution had increased. The coefficient was 0.43 in 1971, while in 1981 it had increased to 0.45. These figures indicated that Hong Kong witnessed a greater inequality of income distribution over the decade (Census & Statistics Dept., 1981:37-38). Differentials in income could also be found among occupational categories. As shown in Table 2.2.7., the median income of the managerial workers in 1981 was three times more than the production and operative workers, while the professionals' median income was twice as much as the production and operative workers'. Taken together, we can postulate that, in terms of income level, there were apparent differentials in market situations among occupational groupings in Hong Kong.

Table 2.2.7. Median Income from Main Employment by Occupation

OCCUPATION	Median Income At 1981 Prices (HK$) 1976	1981	Ratio to Median Income of Production & Operative Workers 1976	1981
Professional, technical & related workers	2 505	3 289	2.5	2.4
Administrative, & managerial workers	4 037	4 638	4.1	3.3
Clerical & related workers	1 392	1 705	1.4	1.2
Sales workers	1 188	1 731	1.2	1.2
Service workers	1 082	1 396	1.1	1.0
Agricultural workers & fishermen	1 076	1 238	1.1	0.9
Production & operative workers & labourers	995	1 387	1.0	1.0

Source : Census & Statistics Dept., 1981:36, Tab.2.15.

In this section, we have highlighted the general economic order of Hong Kong, which serves as the empirical groundwork for the present study. First, we outlined the economic development of Hong Kong since the end of World War II. We characterized how Hong Kong transformed herself from an entrepôt into an industrial and financial center. Second, we indicated how the economic growth affected the occupational structure of the colony, which had witnessed a substantial increase in non-manual labourers. Accordingly, we postulated that more opportunities for upward social mobility were expected. Third, we presented a general description of the differentials in market situations among occupational groupings in Hong Kong. Specifically, the differentials in educational and income

levels were highlighted. Thus, it evidenced that though the economic growth had brought about improvement on educational and income levels, it also brought along greater differentials in these two components of market and class situations.

3. THE HYPOTHESES

With the theoretical framework and empirical context of the study in mind, we can begin to formulate the working hypotheses of the study. There are three hypotheses that the study intends to validate. In this section, we will explicate each of them in turn.

Hypothesis 1 *There is a wide range of variations in market situations among economic classes in Hong Kong.*

According to the theoretical framework discussed in the previous section, economic class refers to a group of individuals sharing common life chances in labor and commodity markets, in other words, a common market situation. Within the capitalistic economic order, the concept of market situation of economic class can be measured by the socioeconomic index which used occupational titles and employment status as indicators and the corresponding income and educational levels as predictors. Accordingly, Hypothesis 1 can be operationalized as follows: if a socioeconomic index for "all" occupational titles in Hong Kong is constructed, there will be a wide range of variation in the socioeconomic scores among these occupational titles. is to be carried out.

The validation of Hypothesis 1 will be presented in Chapter 3.

Hypothesis 2 *The economic classes in Hong Kong cluster together in a way to form a limited number of social classes.*

According to the Weberian conception of social class and class structuration, social class is defined as a cluster of economic classes. This cluster takes the form of a social closure, within which opportunities for both inter- and intra-generation social mobilities are easy and typical, while across which mobilities are hard and rare. Hence, class structuration is a process in which "closures of mobility opportunities" are constructed and defended. Furthermore, as explicated in the theoretical framework of the study, such closures of mobility opportunities can be operationalized by means of the modeling techniques developed in mobility-table analyses. Therefore, Hypothesis 2 can be operationalized as follow: if mobility tables across and within generations are constructed with the economic classes of Hong Kong, a number of closures of mobility opportunities, i.e. social classes, will be found.

The verification of Hypothesis 2 will be discussed in Chapter 4.

Hypothesis 3 *In Hong Kong, an individual's attainment of class situation depends on individual achievement rather than ascription.*

As explicated in Chapter One, the socialization model within the attainment study, especially the work of Blau and Duncan, is said to be heavily laden with the functionalist conception of stratification (cf. Parsons 1940, Davis & Moore, 1945; and Bell, 1973). It has been suggested by theorists of the structural approach that the socialization model implies an open and fully competitive attainment process in which individual achievement will be identified and rewarded (Crowder, 1974; Horan, 1978; & Stolzenberg, 1975). The model has also been said to presume "an optimistic image of modern, mass, industrial society", which

operates under the principles of universalism and achievement-orientation (Knottnerus, 1987:116). Thus, the structuralists accuse the functionalism and the socialization model of ignoring the ascribed and structural constraints which bear upon individuals and their attainment opportunities (Bielby, 1981; Horan, 1978; Knotterus, 1987; Kerckhoff, 1976 & 1984; and Stolzenberg). To the structuralists, status attainment is by no means an individualistic and voluntaristic act and it is certainly not operating within an open and freely competitive context. They construe the attainment process as a social allocation through which individuals' characteristics are identified, selected, processd, classified and rewarded or penalized according to some pre-determined and structurally defined criteria. Thus, the social structure depicted by the structuralists is more or least a deterministic and ascription-orinted context. To summarize these two theoretical stances and incorporate it into the hypothesis on status attainment of this study, i.e. Hypothesis 3, Parsons' famous achievement-ascription dichotomy is used. Thus, Hypothsis 3 is structured in a way to verify with Hong Kong data whether individual achievement really plays a more prominent part than ascription in the attainment process as the functionism and socialization model presume.

Another reason for constructing Hypothesis 3 in the format of the achievement-ascription dichotomy is due to the fact, which has been empirically substantaited by a stream of studies, that the Hong Kong Chinese strongly believe that Hong Kong is a land of abundant opportunities and these opportunities are distributed among them by achievement rather than ascription (Chaney, 1973; Johnson, 1971; Lau & Ho, 1982; and Lau & Kuan, 1988; see also Prologue). Thus, Hypothesis 3 is set out to verify whether this subjective conviction is an objective fact within the social structrue of Hong Kong.

In Hypothesis 3, achievement refers to the ability (both inborn or acquired) and effort that an individual demonstrates in the attainment process, while ascription refers to an individual's family background, sex, race, and any other attributes which are beyond the control of one's ability and effort. Thus, the way to operationalize Hypothesis 3 is to construct models accounting for the variations in market situations of occupational groupings in Hong Kong, i.e. the socioeconomic status scores of these occupations. In these models, different attributes, both of achievement and ascription, are to be incorporated, so as to explore which kinds of attributes assert the greater effect onto the attainment of market situations. These attainment models will be constructed and tested in Chapter Five.

4. THE DATA SETS

The data sets that the present study will analyze are selected from the 1981 census data, which were collected and prepared by the Census and Statistics Department of the Hong Kong Government.

I think it is necessary to explain the reasons for choosing census data and specifically, the 1981 data as the data set for the present study. First of all, in view of the nature of the present study, a considerably large and territory-wide data set is required. Census data is one available option that fits the requirements. If resource constraint is also taken into consideration, the census data is one of the best options available. Second, the 1981 census is chosen instead of other census data available for computer analysis, which are the 1976 and 1986 census data; because it is the only full census which contains the most

comprehensive information necessary for the present study. Third, as explicated in the previous section, 1981 can be viewed as the watershed of the economic development of Hong Kong. On one hand, 1981 was the time when the Hong Kong economy reached its maturity. With the influx of immigrants from China in the 50's and the rapid economic growth in the 60's and 70's, Hong Kong witnessed the consolidation and stabilization of her social and economic structures in the 80's. On the other hand, the impact of 1997 and the entailed problem of brain drain, which probably has affected the social structure of Hong Kong, had not yet surfaced in 1981. Taken together, I think 1981 is the appropriate time to study the occupational and class structure which grew out of the economic development that Hong Kong has witnessed since the war.

The present study will analyze two sets of data chosen from the 1981 census. One is a random sample of twenty percent of the Hong Kong population made available by the Census and Statistics Department. The other is a five percent random sample from the same source. The two sets of data will be tailored in different ways in order to fit different analytical purposes.

(a) **The Individual Data Set :** From the twenty percent sample, all individuals who are aged fifteen or above and economically active[1] are selected. Thus the sample contains 466,057 cases among which 29,888 are males and 167,169 are females. This data set is arrayed by individual, that is, each case contains only personal information of an individual. It is tailored in such a way that it can be used for the construction of a socioeconomic index for all occupational titles listed in the census data, in other words, the data set will be used in the verification of Hypothesis 1.

(b) **The Family Data Set :** The five percent sample is arrayed

by family. In each case, the information of the son/daughter, father and mother are included. This data set is tailored for the purpose of intergeneration mobility analysis, in other words, for the validation of Hypotheses 2 and 3. However, it must be emphasized that the census data is a household data rather than a family data, that is, it only contains family members who live together within a household. Hence, it is not possible to track down, from the data, those sons and daughters who are of age and have moved away from the household. In order to avoid serious bias caused by any possible characteristics demonstrated by those sons and daughters who still lived with their parents after being of age, the data set will only include those sons and daughters aged fifteen to twenty-seven, a considerably large proportion of whom still live with their parents. Furthermore, since the data set is catered for occupational mobility analysis, only those cases in which both sons/daughters and fathers are economically active will be included. Taken together, the data set for mobility analysis contains 19,375 cases, among which 14,000 are males and 8,916 are females.

To justify that the sons and daughters in the family data set are not different from the same age-cohort in the population, a comparison is made between the sons and daughters in the family data set with the same age-cohort found in the 20% individual data set. The comparison is made under the assumption that the age-cohort selected from the 20% individual data set is a representative sample of the same age-cohort found in the population. If we accept such an assumption, then the result of the comparison can verify whether the family data set is a representative sample.

First of all, we can compare the sex and age distributions of the two cohorts. From Table 2.4.1., we can notice, first of all, that the sex

distributions of the two cohorts are quite similar. There is only a 2.5% difference in the sex ratio between the two cohorts, in other words, in the family data set, females are 2.5% over-represented. As for the age distribution, we can detect some discrepancies between the two cohorts, which are distributed in a regular pattern. In the family data set, young men and women aged twenty-one or below are over-represented, while those aged twenty-three or above are under-represented. These discrepancies are by no means surprising because offspring who are of age are expected to have moved away from their parents' households. However, in view of the objective of the present study, what is at issue is not whether there are discrepancies in age distribution between the cohorts, but whether these discrepancies have biased the subjects' market and class situations, which are the primary unit of analysis of the study.

In order to verify whether there are discrepancies in market situations between the two cohorts, three indicators of market situations are chosen for comparison. They are years of education, monthly income from main employment, and socioeconomic status scores[2]. In Table 2.4.2., we make a comparison of the means of the three indicators between the two cohorts. We can see that the difference in years of education is only 0.3. In other words, the young men and women in the family data set stay at school 3.6 months longer than their counterparts. With reference to the educational structure of Hong Kong, such a duration hardly constitutes any significant differences in educational levels. Secondly, the difference in the means of incomes between the cohorts is -132.5, which is slightly less than 10% of the two means. Finally, the difference in the means of the socioeconomic status scores reads 1.2. In light of the range of the scores, which by definition is 100 (cf. Chapter 3, Pp.105-106), the difference can be considered quite small. Taken together, we may say

that the differences in the means of the three indicators are quite small. Furthermore, the differences are not of the same direction, that is, the subjects in family data receive more education and have higher socioeconomic scores, yet they earn less. Therefore, we would suggest that the cohort from the family data sets indicates no apparent bias in market and class situations.

Table 2.4.1. Comparison of the Sex and Age Distributions between the Age Cohorts (15-27) from the Individual and Family Data Sets

	Cohort From the Family Data Set (%)	Cohort From the Individual Data Set (%)	Differences (%)
SEX :			
MALE	53.9	56.4	-2.5
FEMALE	46.1	43.6	2.5
TOTAL	100.0	100.0	
AGE :			
15	2.5	1.5	1.0
16	4.5	3.0	1.5
17	7.0	4.7	2.3
18	9.3	6.9	2.4
19	10.8	8.4	2.4
20	12.7	10.1	2.6
21	11.1	10.1	1.0
22	10.7	10.7	0.0
23	9.5	10.1	-0.6
24	7.7	9.6	-1.9
25	5.9	9.0	-3.1
26	4.6	8.2	-3.6
27	3.7	7.6	-3.9
TOTAL	100.0	100.0	

Table 2.4.2. Comparison of Means of Years of Education, Monthly Income, and Socioeconomic Status Scores between the Age Cohort (15-27) from the Family and Individual Data Set

	Cohort From the Family Data Set	Cohort From the Individual Data Set	Differences
YEARS OF EDUCATION	11.1	10.8	0.3
MONTHLY INCOME FROM MAIN EMPLOYMENT	1329.9	1462.4	-132.5
SOCIOECONOMIC STATUS SCORE	52.9	51.7	1.2

Furthermore, we can break down the comparison into different gender or age groups (cf. Table 2.4.3.). By breaking down the comparisons into male and female groups, we can see that the differences in the means of the three indicators do not deviate much from the overall means differences, shown in Table 2.4.2. Both the men and women from the family data set stay slightly longer at schools and attain slightly higher socioeconomic statuses, while they earn around 10% less than their counterparts.

As for the comparison between different age groups, we can notice that across all age groups, subjects from the family data sets stay longer at school. The largest difference appears in the age group of twenty-five and it reads -0.7. Such a duration, as pointed out above, still constitutes no significant difference in educational levels. As for the income differences, subjects from the family data sets in most of the age groups, except one, earn less than their counterparts. The largest difference is about 5% of the two means and it appears in the age group of fifteen. The only age group that has an income difference in converse

Table 2.4.3. *Comparison of Means of Years of Education, Monthly Income, and Socioeconomic Status Scores between the Age Cohort (15-27) from the Family and Individual Data Sets by Sex and Age*

	Years of Education			Monthly Income from Main Employment			Socioeconomic Status Scores		
	Cohort from the Family Data Set	Cohort from the Individual Data Set	Differences	Cohort from the Family Data Set	Cohort from the Individual Data Set	Differences	Cohort from the Family Data Set	Cohort from the Individual Data Set	Differences
SEX:									
MALE	11.1	10.7	0.4	1421.8	1590.7	-168.9	53.9	52.7	1.2
FEMALE	11.0	10.8	0.2	1223.1	1296.9	- 73.8	51.7	50.3	1.4
AGE:									
15	9.2	9.1	0.1	770.0	813.3	-43.3	33.6	34.1	-0.5
16	9.4	9.4	0.0	843.6	868.4	-24.8	35.9	36.7	-0.8
17	10.0	9.8	0.2	924.0	960.9	-36.9	40.9	40.2	0.7
18	10.7	10.4	0.3	1032.4	1069.1	-36.7	46.6	45.1	1.5
19	11.1	10.8	0.3	1117.4	1149.5	-32.1	51.2	49.2	2.6
20	11.4	11.0	0.4	1210.0	1251.3	-41.3	54.7	52.1	2.6
21	11.4	11.0	0.4	1334.9	1347.8	-12.9	56.6	53.3	3.3
22	11.4	10.9	0.5	1411.5	1445.9	-34.4	56.8	53.3	3.5
23	11.4	10.9	0.5	1512.4	1548.1	-35.7	57.7	53.9	3.8
24	11.6	11.0	0.6	1682.5	1667.8	14.7	58.5	54.5	4.0
25	11.7	11.0	0.7	1767.9	1786.8	-18.9	58.9	55.3	3.6
26	11.5	11.0	0.5	1891.0	1907.9	-15.9	58.9	55.7	3.2
27	11.4	11.0	0.4	1952.5	2029.5	-77.0	60.2	56.4	3.8

direction is the group of twenty-four and the difference is only HK$ 14.7. Finally, in most of the age groups, subjects from the family data set attain higher socioeconomic status scores. The largest difference is -4.0, which can be considered, quite small for scores with a range of 100. Taken together, in breaking down the comparison into age groups, we cannot locate any particular age group in which the differences of the means in the three indicators are irregularly large. Furthermore, for the age groups of twenty-three or above, which have been under-represented in the family data set, we also cannot find any irregularity in the differences of their means. Therefore, we may suggest that though young men and women aged twenty three or above are slightly under-represented in the family data set, it has not caused any substantial bias in the market and class situations.

To summarize, in the previous comparisons, we have tried to validate the external validity of the family data set. We suggest that in regard to the market and class situations, which are the primary concern of the study; the sons and daughters in the family data set do not deviate much from the same age cohort in the population.

However, we must admit that we cannot tell whether the fathers in the family data set are a representative fraction of their generation. Hence, I would reiterate Duncan's criticism and interpretation of data sets for inter-generation mobility study (Duncan,1966:54-63), which has been reviewed in detail in Chapter One (cf. Pp.35-36). Duncan criticizes that in any inter-generational data set for mobility study, males in the "father generation" who have no offspring are totally excluded, while fathers of high fertility are over-represented. Therefore, he suggest that the interpretation that we can draw from such a data set is an origin-destination interpretation rather than an inter-generational

explication. According to the origin-destination interpretation, we take the father's socioeconomic status in an inter-generational data set as the "origin status" of the son/daughter in his/her attainment process and the son/daughter's present status as the current destination of his/her attainment path. With such an origin-destination interpretation in mind, the family data set of the present study can then be construed as an array of origins and destinations of a group of young men and women who were aged fifteen to twenty-seven and lived in Hong Kong in 1981.

5. RECAPITULATION

In this chapter, we have explained the nature of the present study. In the first section, we have outlined the theoretical framework upon which the study is based, namely the Weberian theory of economic class situation. We have also tried to relate the Weberian theoretical propositions to some empirical studies, such as socioeconomic index construction, mobility-table analysis, and status attainment modeling. As a result, we have formulated the Weberian theory of economic class situation into three operationalized postulates, which will be served as the theoretical basis of the study. In the second section, we have outlined the empirical context of the study, that is the economic order of Hong Kong in the early 80's. A brief account of the economic history of Hong Kong since the Second World War was first outlined. Then the general economic structure of Hong Kong in the early 80's was characterized. Finally, we highlighted the differentials in class situations, that is, the differentials in educational and income levels, among occupational

groupings in Hong Kong. In the third section, the three hypotheses that the study is set out to verify are stated. The two data sets that the study is to work with are presented in the fourth section. The external validity of one of the data sets, that is, the family data set used in mobility analysis, was then validated by comparing it with a corresponding cohort from a representative sample.

Having said all this, we are now prepared to verify the three hypotheses that the study has identified.

CHAPTER 3

BUILDING THE OCCUPATIONAL HIERARCHY

"One of the objects of class theory has been to identify the principal line of social cleavage within a given system -- the structural 'fault' running through society to which the most serious disturbances on the political landscape are thought to be ultimately traceable" (Parkin, 1979:3).

The object of the following two chapters is to discover if there are any of these "lines of social cleavage" running through the social system of Hong Kong. According to the theoretical framework explicated in Chapter One, we can trace these lines of social cleavage with two different but closely related approaches. In light of the gradational perspective and the Weberian conception of economic class, we can explore if there are any significant differences in "market situation" among different occupations; by tracing the class boundary among economic classes. The other approach, which is based on Weber's conceptions of social closure and social class, is to see whether there are clusters of economic classes within which similar mobility opportunities are shared, that is to trace the social closures constituting different social classes.

In fact, Hypotheses 1 and 2 of the present study are designed precisely to meet with these two lines of inquiry in class theory. In this

chapter and the next, we will verify Hypotheses 1 and 2 of the present study, and subsequently, I hoped, be able to work out some "'principal lines of social cleavage" that run through the social system of Hong Kong. Accordingly, we will verify the validity of Hypothesis 1 and work out the class boundary for economic classes in Hong Kong in this chapter. Then, in the next chapter, we will further our verification to see if these economic classes have clustered together in such a way that definite social closures are formed to restrain inter-closure mobility and facilitate intra-cluster movement. Finally, it is hoped that a class structure of Hong Kong will emerge from these analyses.

First of all, let us reiterate the hypothesis that will be verified in this chapter.

Hypothesis1 *There is a wide range of variations in market situations among economic classes in Hong Kong.*

It has been suggested in the first two chapters that the market situations of economic classes can be operationalized by the measures of socioeconomic status of occupations, such as those indices postulated by Duncan or Lam and Powers. Therefore, we can verify Hypothesis 1 by constructing a socioeconomic index for 'all' the occupations found in Hong Kong.

However, before we can set out to construct such a socio-economic index, we must first resolve at least two essential problems. Firstly, we must identify the occupational groupings to be used as indicators. Secondly, we must select the criteria for rating these occupations. Thus, this chapter will be divided into four sections: 1. the occupational groupings, 2. the criteria for rating, 3. the socioeconomic index of Hong Kong, and 4. discussion.

1. THE OCCUPATIONAL GROUPINGS

In Hong Kong 1981 census data, occupations are classified into 147 subgroups with three-digit codes (Census & Statistics Dept., 1981b). The classification employed in the census data is based mainly on division of labor and industry. In respect to division of labor, we can find classifications such as managers and administrators, clerical workers, supervisors and foremen, and labourers. On the other hand, in respect to division of industry, there are classifications such as agricultural workers and fishermen, manufacturing workers, and scales and service workers. However, as pointed out before, such a classification neglects one of the essential dimensions of socioeconomic status, namely ownership of property. In order to include the dimension of ownership of property, especially capital, into the index, the variable "Activity Status" in the census data is used. In the census data, the variable is coded into twenty-seven categories, among which are "Employee (Government Sector)", "Employee (Private Sector)", "Self-employed (Except Hawking)", "Employer", etc. (Census and Statistics Dept., 1981b:17). A tabulation of "Activity Status" by "Occupation" is computed so as to identify those occupations which consist of a considerable number of employers. The first ten occupational groupings, which have the highest percentage of employers within the occupation, are listed in Table 3.1.1.. If any occupational grouping consists of twenty percent or more of "employing incumbents", the occupation will then be broken down into two separate titles, and separate socioeconomic scores will be calculated. Accordingly, the first six occupational groupings in Table 3.1.1. meet with the criterion. As a result, the occupational groupings to be used in the construction of socioeconomic index grow from 147 to 153. Hence, the socioeconomic

TABLE 3.1.1. *The First Ten Occupational Groupings Consisting of Most Employing Incumbents*

Code	Title	Percentage of Employing Incumbents Within the Occupational Grouping	Percentage of Employing Incumbents of the Occupational grouping within "Employing Class"
401	Managers and Working Proprietors of Wholesale and Retail Trade (Except Import and Export)	56.28	23.48
402	Managers and Working Proprietors of Import and Export	54.93	6.93
211	General Managers, Production Managers (Except Farm), Sales Managers (Except Wholesale and Retail Trade), Administrative Managers, Personal Managers, Transport Operations Managers, and Other Managerial Workers	36.63	27.06
171	Lawyers, Judges, Jurists and Notaries	30.17	0.44
103	Medical Doctors (excluding Herbalists), Dentists and Veterinarians	29.70	1.36
501	Managers and Working Proprietors of Hotels, Restaurants, Guest Houses, Cafeterias, Bars, Cafes, Discotheques and Dance Halls and Wardens of Hostels	20.03	2.58
611	Master Fishermen, including Master and Shippers of Fishing Craft	13.86	0.14
106	Dispensing Opticians, Pharmaceutical Assistants, Dental Surgery Assistants, Herbalists (Chinese Medicine Practitioners), Acupuncturists, and Other Assistants and Nursing Personnel Not Elsewhere Classified	7.58	0.54
101	Physical and Life Scientists	6.41	0.03
531	Barbers, Hairdressers, Make-up-men (Stage and Studio), Bath Attendants, Manicurists, and Beauticians	6.22	1.33

Source : computed from a 20% sample of 1981's Hong Kong Census Data

index to be constructed will be based on this extended list of occupational groupings. It is believed that this extended list, to a certain extent, has been able to take into account the dimension of ownership of capital, because the "Employers" in these six occupational titles have already made up 61.03 percent of the total "Employing Class" of the sample.

Having identified the occupational groupings to be used as indicators, we must decide who are to be accepted as the incumbents of these occupational groupings ? An old argument within the gradational perspective is whether females should be included as incumbents, and if they should, then whether separate indices should be constructed for males and females, or whether it is desirable to construct a common index for the whole labor force.

Both Duncan's index and an early version of Lam-Powers index (with the 1950's census data) are only based on data for male in the civilian labor force. The rationale behind such a sexually biased choice are

> The social status of a family is more likely to reflect the occupation of the husband than that of the wife, if both are employed. ... Males out-numbered females in the 1950 labor force by better than two and a half to one, and male preponderance characterized the great majority of individual occupations. ... We note that better than one out of ten census occupational titles are explicitly masculine in gender. ...If terminology is any indication, people still think of gainful workers as men, for the most part. (Duncan, 1961:118)

Apart from these arguments of male dominance in occupational life,

Featherman and Stevens recently put forth a more sophisticated argument supporting Duncan's choice. Featherman and Stevens constructed an index corresponding to Duncan's but with both males and females in the labor force and then applied both indices to a study of occupational mobility and attainment. They recommended "the Duncan socioeconomic index... among the socioeconomic indexes as the best scale of occupational status. ... In light of the comparative performance of the scale in analyzing men's and women's occupational attainments..., we are more skeptical about the practical utility of TSEI2 (i.e. the socioeconomic index including both males and females in the labor force)" (Featherman and Stevens, 1982:109).

On the other hand, proponents for a common index for both sexes would point to the fact that, with rising female labor force participation rate and improving social standing for women in recent decades, Duncan's argument is apparently outdated. Furthermore, the argument put forth by Featherman and Stevens is based mainly on practical ground and it is by no means theoretically defensible. Lam and Powers argue for the common index by pointing to the fact that the differences between the index based on men and that based on both sexes may in fact reveal some latent features in the occupational hierarchy, such as occupational segregation by sex and income discrepancy against women. Lam and Powers then support their case by constructing two socioeconomic indices using the 1970's U.S. census data. One is based on male incumbents while the other is based on both males and females. The Pearson correlation between these two indices are as high as +.98(Lam and Powers, 1983:83). However, there are significant deviations in several specific occupations. In 26 out of 30 occupations "the scores based on all incumbents were lower than scores based on male incumbents." Lam and Powers explain that this is due to the fact that "most of them were traditional female occupations, employing high

proportions of women. Because women are generally paid less than men employed in the same occupation, it is not surprising that the median income level of all 26 occupations dropped substantially when women were included in the base population. ...As a result ...they receive a significantly lower ranking in the occupational hierarchy" (Lam and Powers, 1983:84-86). Thus, they conclude that

> A comparison of occupational status scores based on data for men with scores based on data for the total experienced civilian labor force indicated important difference among specific detailed occupations as well as at the level of the major occupational groups. The scores derived from the data for all incumbents reflect occupational segregation by sex (gender) as well as the different income and educational levels of men and women in the experienced civilian labor force. They are, therefore, more valid contemporary measures of the status of occupations than scores based solely on the characteristics of men in the labor force. ... The social structure in which earlier measures of occupational status were developed has change, and important theoretical and methodological issues in social stratification research require that these changes be taken into account in constructing measures of occupational status. (1983:88-89)

For the present study, we will construct the index based on data for both men and women in the labor force. Apart from the arguments cited above, the decision is also based empirically on the labor characteristics revealed from the census data. From Table 3.1.2. we can notice that the female working population in Hong Hong has increased substantially in

absolute number for the last three decades. Furthermore, the proportion of female participants in the economically active population has grown from 28% to 35% for the same period. Finally, the female labor force participation rate rose from 36.8% in 1961 to 49.5% in 1981. Thus, we contend that a socioeconomic index based on data for both male and female incumbents is, theoretically and empirically a more appropriate measure of market situations of occupations in Hong Kong.

TABLE 3.1.2. *FEMALE LABOR FORCE IN HONG KONG, 1961-1981*

Year	Female Participants in Economically Active Population	Female Labor Force Participation Rate	Percentage of Female Participants in Economically Active Population
1961	334,708	28.18	36.8
1971	534,627	33.02	41.3
1976	657,320	34.19	42.8
1981	885,415	35.36	49.5

Source : Census and Statistics Dept., Hong Kong 1976: Tab 6.1; 1981: Tab 2.4; 1981a,: Tab C1.

2. CRITERIA FOR RATING

Having identified the occupational groupings to be used as indicators, we must decide on the criteria to be used for rating them. In this decision, we are confronted with at least three questions. First, what are the predictors to be employed in the rating ? Second, what are the relative weights of these predictors ? Third, what parameters of the predictors are to be used in the calculation of socioeconomic status scores ?

First, we have to decide on the predictors. As explicated in Chapter One, it has been a conventional practice among measures of socioeconomic status to take income and educational levels as predictors for occupational status. It has also been illuminated that such a choice is well grounded within the Weberian theory of class in general and their conception of economic class in particular. On the other hand, empirically, differentials in income and educational levels among the major occupational groupings in Hong Kong have also been evidenced in Chapter Two. Therefore, in the present study, we will employ income and educational levels as predictors in constructing the socioeconomic index of Hong Kong.

In the 1981 census data, education level is recorded in the variable, "Educational Attainment" (Census and Statistics Dept., 1981b:14). It is in ordinal scale. Thus, it has to be recoded into interval scale. [1] As for the income level, there are altogether three variables in the census data recording the income of an individual. They are "Earnings from Main Employment", "Earnings from Secondary Employment", and "Other Cash Income" (Census and Statistics Dept., 1981b:18). In the present study only "Earnings form Main Occupation" will be used in

measuring the income level of the respective occupations. The reason for such a choice is obvious as the other two income variables do not directly reflect the earning ability of the occupation in question.

Second, as far as the relative weights of the predictors are concerned, there seems to be no consensus among the practitioners of the field. First of all, in Duncan's regression equation for occupational prestige, which is based on the 1950's U.S. census data, both income and educational levels carry nearly equal weight, that is, the regression coefficients are 0.59 and 0.55 respectively (Duncan, 1961:124-125). Lam and Powers adopted the same method by simply averaging the scores of the two predictors (Lam and Powers, 1983:50). However, in an updated version of Duncan's index, Siegel works with the 1960's U.S. census data and comes up with a new set of regression coefficients for income and educational levels. They are 0.313 and 0.602 respectively (Siegel, 1971; quoted in Featherman and Stevens, 1982:88 & 91). More recently, Featherman and Stevens, using the 1970's census data, worked out another revised socioeconomic index. They came up with the relative weights similar to those of Siegel's. Therefore, they concluded

> It appears that whereas education and income previously (1950) were about equally important dimensions underlying occupational prestige, the relative emphasis has shifted in the last two decades towards education. No matter which combination of education and income measures are used, income has a smaller effect on the prestige of occupations. (1982:89)

Featherman and Stevens contend that one of the factors contributing to the changes in the relative effects of the two predictors is "the educational upgrading of the U.S. labor force between 1950 and 1970"

(1982:89). In fact, such an interpretation corresponds neatly with a stream of theories concerning education, development and social selection, such as the Human Capital theory, the Post-industrial Society thesis, or the theory of Credential Society. These theories, though from different points of view, argue that the more developed a society, especially its educational system, the more weight will be assigned to educational qualifications in social selection and stratification. [2] These theories seem to suggest that the overall educational level of the labor force could be one possible reference to guide our decision on the relative weights of the predictors.

As for the case of Hong Kong, since we are unable to locate any relevant empirical data for occupational prestige with which to work,[3] it seems that we have to base our decision on the aforementioned reference, that is the overall educational level of the labor force. In light of the discussion on educational and economic development in Hong Kong in Chapter Two, which suggests that Hong Kong was about to enter into a credential society in the early 80s, we suggest that equal weight for income and educational levels is an appropriate measure for a socioeconomic index of Hong Kong in 1981.

Third, we come to the question of what parameters are to be used in measuring the two predictors. In each occupational grouping Duncan uses the percentage of incumbents who had four years of high school education in 1950 as a measure of educational level, and the percentage of incumbents whose annual income was US$ 3,500 or more in 1949 to measure income level. Furthermore, Duncan suggests that the two parameters should be adjusted by age because age is apparently an essential factor accounting for the income as well as educational variations among individuals (Duncan,1961: 120-121). Featherman and Stevens tried out a

number of alternative measures similar to those of Duncan's and conclude that Duncan's suggested parameters are the best (Featherman and Stevens, 1982:109). However, Lam and Powers point out that Duncan's measures are time-prone, that is "with the passage of time, these two indicators will move further away from the statistical average... (Thus), new indicators need to be developed and standardization over time may thereby be compromised" (Lam and Powers, 1983:49). Therefore, Lam and Powers contend that "our decision was to select the median level of years of school completed and the median level of total income for the aggregate of persons in each detailed occupation" (1983:48). Lam and Powers defend their decision by stating

> The calculation of a median measure for each variable instead of an arithmetic mean or other average tendency was based on the distributions of the variables, particularly income, which are skewed. As a consequence of the distributional property, the mean would portray an average which was unrealistically high. The median, on the other hand, would divide the occupational aggregate in half. (1983:48-49)

Paradoxically, using medians as parameters in measuring income and educational levels in socioeconomic index construction has been criticized by Duncan as early as 1961. He pointed out that

> Census data on education and income ordinarily are summarized by medians. The median has desirable properties as measure of central tendency and offers convenience of computation. ...However, it is not clear that any measure of central tendency is the most appropriate summary of the education and income distributions for the problem at hand.

> The median, in particular, is somewhat insensitive to differences between distributions in the proportion of cases lying toward the extremes of the range. ...It seemed appropriate to indicate the educational and income levels of each occupation by the proportion of its incumbents falling toward the upper ends of the respective distributions. (1961:120)

What we have here is a split decision. On one hand, Duncan queries the appropriateness of using central tendency statistics in measuring the properties of the two predictors. Specifically, he criticizes the insensitivity of median towards the cases lying at the extremes. On the other hand, Duncan's suggested parameters are also criticized by Lam and Powers of being time-prone, that is, the parameters would have to be revised with passage of time. Furthermore, as we try to apply Duncan's parameters to the context of Hong Kong, we encounter another problem of the parameters, that is we have to decide the appropriate income and educational levels for Hong Kong on which the computation of the parameters are to be based. In other words, Duncan's parameters are not only time-specific but also society-specific. Thus it may be difficult to make inter-society comparison with them. Thirdly, Duncan's preference for utilizing the "upper ends of the respective distributions" in the measures is also questionable. We may ask why the upper proportion of the respective distributions is used to summarize the properties of the predictors. Though they may work well with distributions which are skewed towards the upper ends, such as the income distributions of most of the occupations in the present study (cf. Table 3.3.2.), in cases where the distributions are skewed towards the lower ends, as the case of the distributions of educational levels of most of the occupations in Hong

Kong (Cf. Table 3.3.1.) Duncan's parameters will inevitably leave out the majority of the incumbents of these occupations and be unable to capture the overall properties of the predictors.

Confronted with such inclusive and entangled arguments, we must clarify a fundamental question, that is : what are the functions of these parameters in the construction of a socio-economic index? Apparently, the parameters in questions are expected to be able to summarize the overall properties of income and educational levels of each occupation, based on which inter-occupational comparisons can then be made and relative status scores be computed. If we accept such a job-description for the parameters, central tendency statistics will seem to be the appropriate measures. However, Ducan and Lam and Powers have emphasized that different central tendency statistics are affected by different aspects of the distribution of the variables. So the question is : are the intra-occupation distributions of income and educational levels really that essential to the problem at hand ? The answer is that they are not, because what is at stake here is the inter-occupational comparison. What we need are parameters that can summarize, on one hand, the aggregate returns an occupation as a whole is able to generate and, on the other, the knowledge, skills, or whatever relevant educational outcome the incumbents of an occupation can bring onto the job. If we accept these general requirements for the parameters in question, it seems apparent that the arithmetic means of income and educational levels of each occupation are the most suitable measures. On one hand, they are able to summarize adequately the overall properties of the predictors, because they are able to take into account distributions skewed towards either end. On the other, they are common statistics that would facilitate comparison among socioeconomic indices from different societies or from

different points in time. Therefore, the present study will use the means of income and educational levels of each occupation in the computation of a socioeconomic score. However, we will also calculate the scores which are based on the medians of the educational and income levels for the sake of comparison (cf. Table 3.3.3).

Another reason for choosing the means rather than the medians in measuring the central tendency of income and educational levels of occupations in Hong Kong is that the means can provide stronger discriminating power in ranking the occupations. As we look at the distributions of income and educational levels of occupations in Hong Kong in Table 3.3.1. and 3.3.2., we can see that a large number of occupations have equal medians so it would be impossible to rank these occupations by medians. On the other hand, we can notice that none of the means of income and educational levels of all the occupations are equal, thus it will serve well as a basis for ranking these occupations.

One final consideration in the selection of parameters is whether we should standardize the income and educational levels with the age composition of each occupation. Again, we are confronted with a split decision on this topic. Duncan has used age-standardized income and educational levels in constructing the index and he justifies his decision by stressing the well-known fact that income and educational levels vary with age-compositions of occupations (Duncan, 1961:120-121). Although Lam and Powers accept the effect of age-compositions on income and educational levels, they contend that variations on age-composition or any other subcategories, such as race or sex, should not be controlled but on the contrary must be reflected in the index. That is because these variations are essential constituents of the occupational hierarchy that the index intends to measure (1983:49). Lam and Powers further their

contention by underlining that "it would always be possible for analysts who wished to do so to control these correlates statistically in the process of performing their analyses (1983:50). Therefore, as a nationwide standard of occupational status, the Lam-Powers index does not incorporate the effects of these subcategories into their index. In the present study, as we intend to construct an overall status index for all the occupations in Hong Kong, we will, therefore, adopt Lam and Powers' decision and use parameters which are not standardized by age-composition.

In summary, the criteria to be used in this study for rating occupational status are the means of income and educational levels of each occupation and each of the means will carry equal weight in the measure.

3. THE SOCIOECONOMIC INDEX

Having decided on the occupational groupings to be used as indicators, the predictors for ranking these occupations, and the parameters used to measure these predictors, we can now proceed with the task of constructing the socioeconomic index. The procedures for computing the status scores for each occupation is similar to that of Lam and Powers (Lam and Powers, 1983:50-51). The only difference is that I will use means rather than medians in the calculation. The procedure can be summarized as follows:

(a) The 153 occupational groupings are ranked in ascending order according to the means of the educational levels of the incumbents.

(b) The occupational groupings are ranked the same way according to the means of the incumbents' income levels.

(c) By using the number of incumbents in each occupational grouping, we compute the cumulative intervals of the incumbents in each occupational grouping for each of the two rankings.

(d) The midpoints of the cumulative intervals of each occupational groupings in each of two rankings are divided by the total number of incumbents in all the occupational groupings. The resulting values, which range from 0 to 100, can be taken as the scores for income and educational levels of each grouping (cf. Table 3.3.3., column 2 & 4).

(e) By averaging the two scores of each occupational grouping, we then obtain the socioeconomic status score for each occupational grouping (cf. Table 3.3.3.).

Following these procedures, the socioeconomic index is then constructed with *the individual data set* which is a 20% sample from the 1981 Hong Kong census data and consists of all the individuals, both males and females, who were aged 15 or above in 1981 and were members of the civilian labor force.[4] The result of the construction is shown in Table 3.3.3..

TABLE 3.3.1. THE DISTRIBUTION OF YEARS OF EDUCATION OF OCCUPATIONAL GROUPINGS IN HONG KONG, 1981

CODE	OCCUPATIONAL TITLE[aa]	EDUCATION SCORE	MEAN	MEDIAN	STANDARD DEVIATION	SKEWNESS
103	MEDICAL DOCTORS, DENTISTS, ETC	99.9440	18.3953	18	0.79726	1.5227
121	TEACHERS IN POST-SECONDARY INSTITUTES	99.8271	18.3824	18	1.31370	-0.3781
109	MEDICAL DOCTORS, DENTISTS, ETC-EMPLOYERS	99.7427	18.3211	18	0.73592	1.8621
171	LAWYERS, JUDGES, JURISTS & NOTARIES	99.7013	18.3086	18	0.72475	1.9317
179	LAWYERS, JUDGES, ETC-EMPLOYERS	99.6761	18.2571	18	0.67428	2.2682
101	PHYSICAL & LIFE SCIENTISTS	99.6600	17.9872	18	1.15650	-0.3881
201	GOVERNMENT ADMINISTRATORS, ETC	99.6283	17.6445	18	1.12195	-0.6728
122	TEACHERS IN SECONDARY SCHOOLS	99.2258	17.1197	17	1.55303	-1.1088
104	QUALIFIED NURSES, MIDWIVES, ETC	98.7042	17.0559	17	0.29932	4.4405
111	ARCHITECTS, ENGINEERS, SURVEYORS, ETC	98.2379	16.5892	17	2.02832	-0.5642
124	TEACHERS NOT ELSEWHERE CLASSIFIED	97.8005	16.4577	17	2.25602	-0.3681
202	FOREIGN DIPLOMATS, CONSULS, ETC	97.6812	16.3455	18	2.30312	-0.4312
151	AUTHORS, JOURNALISTS, & RELATED WORKERS	97.6044	16.0061	17	2.30584	-0.1586
174	SOCIAL WORKERS & LABOUR OFFICERS	97.4656	15.9568	17	2.05526	-0.1817
131	ECONOMISTS, STATISTICIANS, ETC	97.2957	15.8298	15	2.20540	0.0766
102	PHYSICAL & LIFE SCIENCES TECHNICIANS	97.1648	15.6391	15	1.97279	0.2442
173	LIBRARIANS, ARCHIVISTS, & CURATORS	97.1152	15.4709	15	2.34871	0.3221
105	PHYSIOTHERAPISTS, PHARMACISTS, ETC	97.0587	15.3435	15	2.24164	0.3391
301	GOVERNMENT EXECUTIVE OFFICIALS, ETC	96.8578	15.2870	15	2.08861	0.3545
123	TEACHERS IN PRIMARY SCHOOLS, ETC	96.2717	15.2618	17	2.19823	-0.5032
141	RELIGIOUS WORKERS	95.7946	15.1462	17	4.16459	-1.5519
175	PROFESSIONAL N.E.C.[bb]	95.6537	14.9807	15	2.07104	0.5400
132	ACCOUNTANTS & AUDITORS	95.3610	14.9321	15	2.15670	0.5935
113	AIRCRAFT & SHIP OFFICERS	95.1244	14.7328	15	2.23804	0.4728
211	GENERAL MANAGERS, ETC	94.2813	14.7007	15	3.00343	-0.2255
112	ENGINEERING TECHNICIANS, ETC	93.1702	14.5528	15	2.13584	0.4176
312	ELECTRONIC COMPUTER OPERATORS, ETC	92.8025	13.6928	13	1.88539	0.0991
335	POSTMASTERS, ETC	92.7111	13.5851	13	1.09846	1.8607
334	AIR TRANSPORT REGULATORY STAFF, ETC	92.6617	13.4248	13	2.24785	-0.1867
311	STENOGRAPHIC SECRETARIES, TYPIST, ETC	91.4757	13.3857	13	1.74868	0.1444
106	MEDICAL ASSISTANTS, HERBALISTS, ETC	90.1952	13.2857	13	3.36162	0.0509
219	GENERAL MANAGERS, ETC-EMPLOYERS	89.6011	13.1858	13	3.33797	0.1304
321	BOOKKEEPERS, BANK TELLERS, ETC	86.8840	13.0811	13	2.10910	-0.1146
409	MANAGERS OF IMPORT & EXPORT-EMPLOYERS	84.5172	13.0551	13	4.16322	-0.6617
342	STOCK CLERKS, PERSONNEL CLERKS, ETC	82.3339	13.0075	13	2.04807	-0.0642
341	OFFICE MACHINE OPERATORS, ETC	80.2362	12.9221	13	2.82569	-1.0475
402	MANAGERS OF IMPORT & EXPORT	80.1024	12.8614	13	3.90703	-0.7933
337	TELEPHONE SWITCHBOARD OPERATORS, ETC	79.8428	12.7448	13	1.80536	-0.5719
161	SCULPTORS, PAINTERS, DESIGNERS, ETC	79.4405	12.7165	13	2.90507	0.1706
851	BROADCASTING STATION OPERATORS, ETC	79.1599	12.6407	13	2.86407	0.1412
332	RAIL TRANSPORT REGULATORY STAFF, ETC	79.1085	12.5175	13	3.86551	-1.2424
162	COMPOSERS, MUSICIANS, SINGERS, ETC	78.9983	12.5172	13	3.85634	-0.7306
411	INSURANCE, REAL ESTATE SALESMEN	78.7047	12.5025	13	3.41443	-0.6373
343	HOTEL, OFFICE, CLINIC RECEPTIONISTS	78.4093	12.2216	13	2.66325	-1.0812
542	FIRE FIGHTERS, PRISON GUARDS, ETC	78.0634	12.0208	13	2.58712	0.0921
551	TOURIST GUIDES, AIR HOSTESSES, ETC	77.7141	11.6962	13	3.94183	-0.7708
963	RAIL TRANSPORT EQUIPMENT OPERATORS	77.5770	11.6154	12	2.60956	0.1652
403	SALES SUPERVISORS, ETC	77.0780	11.6040	13	3.71245	-0.6399
541	POLICEMEN,SECURITY GUARDS, ETC	76.1035	11.5669	12	2.39933	0.2075
172	PROFESSIONAL SPORTMEN, JOCKEYS, ETC	75.5803	11.3968	13	3.90913	-0.5805
336	POSTMEN, MESSENGERS, ETC	75.4139	11.3407	12	2.62778	-1.1358
422	FASHION MODELS AND DEMONSTRATORS	75.2529	11.2208	11	3.05055	-0.2038
424	SALES WORKERS N.E.C.	74.9326	11.1755	12	3.53209	-0.7748
502	HOUSEKEEPERS IN HOTELS & INSTITUTIONS	74.4454	11.0348	11	2.44187	0.4309
845	TELEPHONE & TELEGRAPH INSTALLERS, ETC	74.1196	11.0347	12	3.03839	-1.3188
331	SEA TRANSPORT REGULATORY STAFF, ETC	73.9426	10.9057	12	4.16868	-0.8144
701	PRODUCTION SUPERVISORS & FOREMEN	73.1006	10.7811	11	3.61758	-0.2839
941	STATIONARY ENGINE OPERATORS	72.2336	10.7173	10	2.64859	0.8519
903	PHOTOGRAPHIC PRINTERS, ETC	72.1365	10.6220	11	2.90137	-0.6323
333	ROAD TRANSPORT REGULATORY STAFF, ETC	72.0606	10.5786	11	3.06458	-0.5479
921	QUALITY INSPECTORS & TESTERS	71.6888	10.2151	11	3.58763	-0.8095
843	ELECTRICAL FITTERS &ASSEMBLERS	70.8496	10.0243	10	3.43846	-0.5180
841	ELECTRICAL APPLIANCES MECHANICS	69.8010	9.9376	10	2.95461	-0.3668
408	MANAGERS OF WHOLESALE & RETAIL-EMPLOYERS	68.8417	9.8708	10	4.32338	-0.2836
421	WHOLESALE & RETAIL TRADE SALESMEN, ETC	66.8504	9.8511	10	3.54920	-0.8464
842	ELECTRICAL WIREMEN & REPAIRMEN	65.0828	9.7344	10	3.03012	-0.3183
831	MOTOR-VEHICLES MECHANICS & REPAIRERS	64.5404	9.7006	10	2.76485	-0.4959
846	MOTOR-VEHICLE ELECTRICIANS	64.1666	9.6779	9	2.45574	0.2680
901	COMPOSITORS, TYPESETTERS, ETC	64.0484	9.6073	9	2.97236	-0.3268
832	MECHANICAL MACHINE FITTERS & ASSEMBLERS	63.3052	9.5427	9	3.34639	-0.4633
905	PRINTING PRESSMEN (LETTER-PRESS)	62.5423	9.5125	9	2.87665	-0.6009
741	CHEMICAL PROCESSORS & RELATED WORKERS	62.3893	9.4965	9	4.24264	-0.1609
906	PRINTERS N.E.C.	62.2164	9.4643	9	3.18260	-0.6882
401	MANAGERS OF WHOLESALE & RETAIL	61.7575	9.4097	9	4.52699	-0.2439
904	PRINTING PRESSMEN (LITHO OFFSET)	61.3949	9.3534	9	2.94980	-0.7423
834	SEWING MACHINE MECHANICS, ETC	61.2695	9.3424	9	3.01283	-0.4457
844	ELECTRONIC EQUIPMENT ASSEMBLERS	60.0128	9.2741	9	3.25465	-0.5778
833	WATCH & CLOCK MAKERS & REPAIRERS	58.4323	9.2355	9	3.37530	-0.6283
553	OTHER SERVICE WORKER N.E.C.	57.8738	9.2175	9	3.96017	-0.5354
501	MANAGERS OF HOTELS OR RESTAURANTS	57.5398	9.1807	8	3.86923	-0.4431

861	JEWELERS, GOLDSMITHS, ETC	57.0986	9.0943	8	2.70593	-0.3456
964	ROAD TRANSPORT EQUIPMENT OPERATORS	54.8132	9.0314	8	2.87765	-0.4517
772	GARMENT PATTERN MAKERS, MARKERS, ETC	52.3952	8.8990	8	3.35291	-0.8269
934	INSULATORS, GLAZIERS, & PAPERHANGERS	51.9613	8.7355	8	3.13535	-0.8497
823	PLUMBERS & PIPE FITTERS	51.7754	8.7340	8	3.01801	-0.5388
754	BLEACHERS, DYERS, ETC	51.3880	8.7263	8	3.77425	-0.3802
761	TANNERS, FELLMONGERS & PELT DRESSERS	51.0865	8.7194	8	3.60386	-0.6172
912	AUTOMOBILE PAINTERS	50.9844	8.6754	8	3.00208	-0.9884
509	MANAGERS OF HOTELS OR REST.-EMPLOYERS	50.8979	8.6659	8	4.64410	-0.0435
796	BREWERS, & WINE & BEVERAGE MAKERS	50.8460	8.6250	8	4.14997	-0.3741
822	SHEET-METAL WORKERS, COPPERSMITHS, ETC	50.4423	8.5572	8	3.18009	-0.6172
711	MINERS & RELATED WORKERS	50.0224	8.5377	8	4.11027	-0.2869
774	SEWERS, SEWING-MACHINE OPERATORS, ETC	46.2593	8.4714	8	2.93252	-0.7267
872	POTTERS, POTTERY MAKERS, ETC	42.4872	8.4678	8	3.63629	-0.5792
913	SIGN WRITERS & OTHER PAINTERS	42.2515	8.4621	8	3.24530	-0.6255
902	BOOKBLINDERS	42.0004	8.4414	8	3.35436	-0.6075
871	OPTICAL LENS MAKERS, ETC	41.8748	8.3875	8	3.70447	-0.4382
771	TAILORS,FUR TAILORS, & DRESSMAKERS	41.4598	8.3445	8	3.02841	-0.6032
752	WEAVING-& KNITTING-MACHINE SETTERS,ETC	41.0348	8.31650	8	3.85682	-0.59887
821	TOOL & DIE MAKERS, ETC	39.8751	8.31228	8	3.73167	-0.67958
795	BAKERS, PASTRYCOOKS,ETC	38.6898	8.31107	8	3.10230	-0.73905
782	LEATHER GOODS MAKERS	38.4404	8.30225	8	3.37092	-0.63977
531	BARBERS, HAIRDRESSERS, ETC	37.9323	8.28109	8	3.23423	-0.75829
511	COOKS, HOTEL MAID, WAITERS, ETC	35.6185	8.24170	8	3.49795	-0.71709
521	LAUNDERS, DRY-CLEARNERS & PRESSERS	33.3610	8.20007	8	3.38038	-0.72780
824	STRUCTURAL METAL PREPARERS & ERECTORS	32.9983	8.18588	8	3.61676	-0.77317
794	DAIRY PRODUCT PROCESSORS, ETC	32.9457	8.12069	8	3.82548	-0.22626
801	CABINETMAKERS & RELATED WOOD WORKERS	32.5556	8.11876	8	3.23528	-0.66124
721	METAL PROCESSORS	31.6454	8.11247	8	3.78552	-0.52592
881	PLASTIC MOULDING-MACHINE OPERATORS	30.7858	8.08034	8	3.82525	-0.46212
773	KNITTERS & KNITTING-MACHINE OPERATORS	29.9516	8.06274	8	3.25429	-0.68635
798	TOBACCO PREPARERS, ETC	29.4449	8.03922	8	3.89852	0.05572
923	MUSICAL INSTRUMENT MAKERS, ETC	29.3397	8.00110	8	3.94284	-0.49336
965	LIGHTHOUSE OPERATORS, ETC	29.1720	7.98560	8	3.77043	-0.57348
961	FOREIGN-GOING SHIP EQUIPMENT OPERATORS	28.9234	7.93860	8	4.24844	-0.35298
911	CONSTRUCTION PAINTERS, ETC	28.5042	7.93390	8	3.44836	-0.50427
953	RIGGERS, CRANE OPERATORS, ETC	28.1640	7.92610	8	3.62229	-0.66473
891	PAPER & PAPERBOARD PRODUCT MAKERS	27.9427	7.91090	8	3.67383	-0.48262
811	STONE CUTTERS & CARVERS	27.7954	7.88976	8	3.44861	-0.72488
933	CONSTRUCTION CARPENTERS, JOINERS, ETC	27.4879	7.88530	8	3.36657	-0.67254
731	WOOD PREPARATION WORKERS, SAWYERS, ETC	27.1274	7.78947	8	3.40968	-0.65635
935	WELL DIGGERS, UNDERWATER WORKERS,ETC	26.9577	7.75310	8	3.85288	-0.66677
931	BRICKLAYERS, PLASTERERS, ETC	26.4460	7.69210	8	3.72744	-0.62955
952	RAILWAY & ROAD VEHICLE LOADERS, ETC	25.1347	7.63430	8	3.97538	-0.44411
603	FORESTERS, GARDENER & RELATED WORKERS	24.1829	7.58348	8	4.33932	-0.08066
793	FOOD PRESERVERS & CANNERS, ETC	24.0250	7.58046	8	3.78262	-0.49303
612	TOPICAL FISH & GOLD FISH HATCHERS	23.9220	7.50649	8	4.26005	-0.25314
883	TIRE MAKERS, RUBBER FOOTWEAR MAKERS, ETC	23.6294	7.49890	8	4.11436	-0.40829
753	WEAVERS & RELATED WORKERS	22.9695	7.47147	8	3.96269	-0.37458
792	BUTCHERS, FISH BUTCHERS, ETC	22.4896	7.35699	8	3.52835	-0.48615
781	SHOEMAKERS, SHOE REPAIRERS, ETC	22.1598	7.34105	8	3.42923	-0.52427
938	CONSTRUCTION WORKER N.E.C	21.1876	7.33080	8	4.16004	-0.43089
932	REINFORCED CONCRETERS, ETC	19.9765	7.32590	8	3.76064	-0.56126
936	SCAFFOLDERS	19.4471	7.31100	8	3.92265	-0.45653
791	GAIN MILLERS, ETC	19.3695	7.26957	8	4.02039	-0.24857
775	FURNITURE UPHOLSTERERS, ETC	18.7714	7.25399	8	4.01298	-0.53845
797	FOOD PROCESSORS N.E.C.	18.1426	7.07789	8	3.85655	-0.33866
937	STONEMASONS	18.0809	7.07690	8	4.06788	-0.28122
971	LABOURERS N.E.C.	16.5438	7.05900	8	4.25534	-0.31622
951	HAND PACKERS, MACHINE PACKERS, ETC	14.3613	7.01110	8	4.44030	-0.26882
751	FIBRE PREPARERS	13.4421	6.79523	8	4.04755	-0.30823
922	RATTAN FURNITURE & BRUSH MAKERS, ETC	13.1033	6.76080	8	3.72715	-0.47027
882	PLASTIC PRODUCT ASSEMBLERS	12.4336	6.59380	8	4.44336	-0.18209
514	BABY-SITTERS	11.7390	6.53119	8	4.92906	-0.01074
962	LOCAL FERRY EQUIPMENT OPERATORS	11.5268	6.46290	6	4.53553	-0.00645
552	EMBALMERS AND UNDERTAKERS	11.4137	6.24390	6	3.54359	-0.58169
512	CHARWORKERS, CLEARNERS, WATCHMEN, ETC	8.5034	6.20393	6	4.45845	-0.05844
423	STREET HAWKERS, PEDDLERS & NEWSVENDORS	4.01517	6.14277	6	4.25003	-0.11567
602	FARM HANDS, POULTRY HATCHERY, ETC	2.28775	5.78019	6	4.56009	0.04327
513	DOMESTIC AMAHS	1.54518	5.71155	6	5.68786	0.39647
601	MASTER FARMERS, ETC	0.59862	5.36344	6	4.48147	0.22127
611	MASTER FISHERMEN, ETC	0.23599	5.02410	6	5.05119	0.53119
613	FISHERMEN, & RELATED WORKERS	0.10902	4.53247	6	4.50923	0.53363

NOTE : [a] The occupational titles listed are abbreviations. A detailed title list can be found in Census & Statistics Dept., 1981b.

[b] N.E.C. : Not Elsewhere Classified

TABLE 3.3.2. DISTRIBUTION OF INCOME LEVEL OF OCCUPATIONAL GROUPINGS IN HONG KONG, 1981

CODE	OCCUPATIONAL TITLE[aa]	INCOME SCORE	MEAN	MEDIAN	STANDARD DEVIATION	SKEWNESS
179	LAWYERS, JUDGES, ETC-EMPLOYERS	99.9925	30749.9	22500.0	21715.5	1.5718
109	MEDICAL DOCTORS, DENTISTS, ETC-EMPLOYERS	99.9612	18350.1	12250.0	16680.6	2.0489
202	FOREIGN DIPLOMATS, CONSULS, ETC	99.9315	12904.0	8000.0	20979.8	3.6786
171	LAWYERS, JUDGES, JURISTS & NOTARIES	99.9078	11770.2	10000.0	9110.6	1.1631
103	MEDICAL DOCTORS, DENTISTS, ETC	99.8341	10160.0	8965.0	7928.0	3.2223
201	GOVERNMENT ADMINISTRATORS, ETC	99.7548	9810.6	8050.0	4540.4	1.5473
113	AIRCRAFT & SHIP OFFICERS	99.7030	8128.7	5000.0	7695.7	1.4470
121	TEACHERS IN POST-SECONDARY INSTITUTES	99.6136	7883.9	6900.0	5933.6	7.1196
219	GENERAL MANAGERS, ETC-EMPLOYERS	99.0822	7517.3	4000.0	12057.5	4.9273
409	MANAGERS OF IMPORT & EXPORT-EMPLOYERS	98.4908	6818.7	4000.0	10606.9	5.3991
211	GENERAL MANAGERS, ETC	97.5558	6739.2	4500.0	7912.9	5.7336
111	ARCHITECTS, ENGINEERS, SURVEYORS, ETC	96.4172	6567.3	4781.0	6446.2	6.7097
101	PHYSICAL & LIFE SCIENTISTS	96.0846	6356.8	4410.0	7391.4	5.3509
301	GOVERNMENT EXECUTIVE OFFICIALS, ETC	95.9111	5680.2	4800.0	2548.5	1.4972
402	MANAGERS OF IMPORT & EXPORT	95.6471	4830.6	3000.0	7412.8	7.6290
124	TEACHERS NOT ELSEWHERE CLASSIFIED	95.4350	4806.3	3677.5	4233.3	1.7460
509	MANAGERS OF HOTELS OR REST.-EMPLOYERS	95.2768	4716.6	3000.0	6436.8	4.7058
408	MANAGERS OF WHOLESALE & RETAIL-EMPLOYERS	94.8233	4627.0	3000.0	7928.2	7.6209
132	ACCOUNTANTS & AUDITORS	94.2068	4367.0	2600.0	5718.9	7.0279
151	AUTHORS, JOURNALISTS, & RELATED WORKERS	93.9281	4269.3	2500.0	7792.5	9.2106
131	ECONOMISTS, STATISTICIANS, ETC	93.7553	4076.9	3000.0	3752.4	4.4948
122	TEACHERS IN SECONDARY SCHOOLS	93.2740	3857.0	3780.0	1786.7	0.8366
105	PHYSIOTHERAPISTS, PHARMACISTS, ETC	92.8588	3798.8	3200.0	3963.6	9.7398
175	PROFESSIONAL N.E.C.	92.7381	3702.9	2730.0	4899.4	11.7183
174	SOCIAL WORKERS & LABOUR OFFICERS	92.5853	3643.8	3200.0	2237.8	1.8589
162	COMPOSERS, MUSICIANS, SINGERS, ETC	92.4194	3632.2	2800.0	5201.3	9.9359
411	INSURANCE, REAL ESTATE SALESMEN	92.1259	3471.5	2000.0	4909.2	5.1713
172	PROFESSIONAL SPORTMEN, JOCKEYS, ETC	91.9165	3366.3	2000.0	3328.0	2.7589
334	AIR TRANSPORT REGULATORY STAFF, ETC	91.8738	3330.7	2400.0	2716.3	2.3756
542	FIRE FIGHTERS, PRISON GUARDS, ETC	91.5986	3307.7	2600.0	2139.9	3.9891
173	LIBRARIANS, ARCHIVISTS, & CURATORS	91.3318	3184.4	2000.0	3068.9	2.6711
112	ENGINEERING TECHNICIANS, ETC	91.0144	3183.7	2600.0	2570.3	8.7491
401	MANAGERS OF WHOLESALE & RETAIL	90.4003	3100.3	2100.0	3981.0	7.7269
335	POSTMASTERS, ETC	90.0625	3023.0	3000.0	1495.4	1.1668
102	PHYSICAL & LIFE SCIENCES TECHNICIANS	90.0131	3013.0	2900.0	1806.1	1.1657
541	POLICEMEN,SECURITY GUARDS, ETC	89.4746	2951.2	2555.0	1860.0	4.5805
123	TEACHERS IN PRIMARY SCHOOLS, ETC	88.5441	2951.2	3422.0	1585.0	-0.1261
332	RAIL TRANSPORT REGULATORY STAFF, ETC	88.1106	2925.5	2400.0	1879.4	1.8429
403	SALES SUPERVISORS, ETC	87.6332	2781.2	2000.0	3363.7	13.2398
104	QUALIFIED NURSES, MIDWIVES, ETC	87.0260	2701.2	2552.5	1607.1	0.5053
161	SCULPTORS, PAINTERS, DESIGNERS, ETC	86.6422	2530.3	1800.0	4566.6	15.3071
501	MANAGERS OF HOTELS OR RESTAURANTS	86.2213	2496.7	2000.0	3137.0	11.0605
106	MEDICAL ASSISTANTS, HERBALISTS, ETC	85.9185	2294.3	1800.0	1497.2	1.6272
701	PRODUCTION SUPERVISORS & FOREMEN	84.9797	2267.6	2000.0	1067.2	1.3040
963	RAIL TRANSPORT EQUIPMENT OPERATORS	84.1303	2245.4	2100.0	809.3	1.0229
611	MASTER FISHERMEN, ETC	84.0783	2179.7	1500.0	3043.8	3.6362
964	ROAD TRANSPORT EQUIPMENT OPERATORS	82.0366	2075.4	2000.0	737.0	1.7546
851	BROADCASTING STATION OPERATORS, ETC	79.9740	2068.0	1800.0	1175.5	1.8758
312	ELECTRONIC COMPUTER OPERATORS, ETC	79.8640	2066.1	1800.0	970.9	1.3243
331	SEA TRANSPORT REGULATORY STAFF, ETC	79.7665	2020.82	1800	1036.77	1.5347
961	FOREIGN-GOING SHIP EQUIPMENT OPERATORS	79.5593	2012.40	1900	1151.80	0.9864
953	RIGGERS, CRANE OPERATORS, ETC	79.2771	2003.50	2000	719.70	-0.2894
551	TOURIST GUIDES, AIR HOSTESSES, ETC	79.0723	2000.69	1500	1341.98	1.9469
502	HOUSEKEEPERS IN HOTELS & INSTITUTIONS	78.7939	1979.25	1800	849.46	1.1901
311	STENOGRAPHIC SECRETARIES, TYPIST, ETC	77.4616	1953.14	1600	1015.06	1.4746
933	CONSTRUCTION CARPENTERS, JOINERS, ETC	76.0246	1888.80	2000	792.40	0.5666
333	ROAD TRANSPORT REGULATORY STAFF, ETC	75.7143	1882.80	1800	708.50	1.1854
711	MINERS & RELATED WORKERS	75.6608	1858.50	2000	927.10	0.3551
337	TELEPHONE SWITCHBOARD OPERATORS, ETC	75.4770	1852.42	1500	1109.81	1.9935
934	INSULATORS, GLAZIERS, & PAPERHANGERS	75.2768	1832.40	1800	790.10	0.5793
962	LOCAL FERRY EQUIPMENT OPERATORS	75.1332	1829.40	1800	826.50	0.7765
321	BOOKKEEPERS, BANK TELLERS, ETC	72.7828	1827.33	1500	910.97	1.7156
937	STONEMASONS	70.5181	1825.40	1800	741.70	0.3470
823	PLUMBERS & PIPE FITTERS	70.3533	1804.26	1700	776.47	0.9112
932	REINFORCED CONCRETERS, ETC	69.7425	1804.00	1800	725.40	0.4602
845	TELEPHONE & TELEGRAPH INSTALLERS, ETC	69.1277	1794.94	1693	707.47	1.2758
832	MECHANICAL MACHINE FITTERS & ASSEMBLERS	68.3359	1794.64	1750	784.50	1.0993
931	BRICKLAYERS, PLASTERERS, ETC	67.2721	1768.58	1700	808.24	1.4807
342	STOCK CLERKS, PERSONNEL CLERKS, ETC	64.7867	1767.93	1500	829.73	1.4101
941	STATIONARY ENGINE OPERATORS	62.6724	1762.66	1650	683.02	0.7173
936	SCAFFOLDERS	62.5558	1752.67	1700	815.30	0.4478
341	OFFICE MACHINE OPERATORS, ETC	62.4558	1743.15	1500	857.75	1.6337
141	RELIGIOUS WORKERS	62.3648	1730.28	1500	1862.29	2.6831
913	SIGN WRITERS & OTHER PAINTERS	62.1051	1726.63	1700	750.50	1.1812
424	SALES WORKERS N.E.C.	61.5895	1726.39	1600	1129.96	16.8623
938	CONSTRUCTION WORKER N.E.C	60.5309	1716.23	1600	734.97	1.0712
935	WELL DIGGERS, UNDERWATER WORKERS,ETC	59.6951	1715.75	1600	722.20	0.8893
842	ELECTRICAL WIREMEN & REPAIRMEN	59.4212	1708.31	1600	750.40	1.0168
801	CABINETMAKERS & RELATED WOOD WORKERS	58.8527	1699.15	1600	850.51	1.1160
612	TOPICAL FISH & GOLD FISH HATCHERS	58.4604	1696.12	1500	1200.24	0.8005

911	CONSTRUCTION PAINTERS, ETC	58.2135	1689.54	1500	799.91	1.2229
792	BUTCHERS, FISH BUTCHERS, ETC	57.8706	1688.29	1600	784.43	1.6101
901	COMPOSITORS, TYPESETTERS, ETC	57.6644	1672.13	1560	702.68	1.3718
731	WOOD PREPARATION WORKERS, SAWYERS, ETC	57.4819	1669.99	1515	808.92	0.6511
905	PRINTING PRESSMEN (LETTER-PRESS)	57.2796	1661.24	1550	688.28	0.9671
841	ELECTRICAL APPLIANCES MECHANICS	56.6072	1659.76	1500	789.89	1.2386
861	JEWELERS, GOLDSMITHS, ETC	55.7947	1654.55	1500	1734.11	19.2673
824	STRUCTURAL METAL PREPARERS & ERECTORS	55.4867	1648.16	1500	895.91	2.0950
343	HOTEL, OFFICE, CLINIC RECEPTIONISTS	55.3408	1635.86	1500	740.48	1.5565
511	COOKS, HOTEL MAID, WAITERS, ETC	53.3001	1627.95	1500	997.04	12.5998
822	SHEET-METAL WORKERS, COPPERSMITHS, ETC	50.9623	1621.28	1500	766.50	0.9180
811	STONE CUTTERS & CARVERS	50.5379	1618.49	1500	915.68	1.6047
741	CHEMICAL PROCESSORS & RELATED WORKERS	50.4789	1603.23	1500	868.88	1.8220
834	SEWING MACHINE MECHANICS, ETC	50.3675	1598.37	1500	717.69	0.8198
553	OTHER SERVICE WORKER N.E.C.	50.1328	1594.73	1335	1034.73	4.2515
903	PHOTOGRAPHIC PRINTERS, ETC	49.9328	1582.46	1500	729.51	0.9520
904	PRINTING PRESSMEN (LITHO OFFSET)	49.8420	1582.04	1500	608.00	1.1400
552	EMBALMERS AND UNDERTAKERS	49.7878	1571.06	1500	589.12	0.9106
965	LIGHTHOUSE OPERATORS, ETC	49.7109	1562.84	1500	638.15	-0.0416
793	FOOD PRESERVERS & CANNERS, ETC	49.5483	1549.30	1500	766.37	1.3517
754	BLEACHERS, DYERS, ETC	49.2126	1542.27	1500	667.49	1.8061
846	MOTOR-VEHICLE ELECTRICIANS	48.9554	1538.54	1500	742.50	0.7575
771	TAILORS,FUR TAILORS, & DRESSMAKERS	48.6026	1538.19	1500	831.93	1.5043
952	RAILWAY & ROAD VEHICLE LOADERS, ETC	47.3773	1535.12	1500	611.86	1.2372
603	FORESTERS, GARDENER & RELATED WORKERS	46.4254	1532.88	1500	568.98	1.6664
831	MOTOR-VEHICLES MECHANICS & REPAIRERS	46.0045	1523.88	1500	783.72	1.0253
796	BREWERS, & WINE & BEVERAGE MAKERS	45.6399	1517.86	1390	684.13	2.1012
795	BAKERS, PASTRYCOOKS, ETC	45.5189	1517.84	1500	697.10	1.1729
761	TANNERS, FELLMONGERS & PELT DRESSERS	45.3444	1508.24	1350	890.04	2.6118
912	AUTOMOBILE PAINTERS	45.2424	1507.81	1400	922.86	4.5551
843	ELECTRICAL FITTERS &ASSEMBLERS	44.7029	1505.48	1300	754.64	1.4733
531	BARBERS, HAIRDRESSERS, ETC	43.8323	1499.03	1350	836.15	2.1593
794	DAIRY PRODUCT PROCESSORS, ETC	43.4533	1490.00	1500	621.82	0.7154
721	METAL PROCESSORS	42.9206	1484.25	1400	749.01	1.6106
423	STREET HAWKERS, PEDDLERS & NEWSVENDORS	40.8073	1480.26	1250	1635.07	13.1688
871	OPTICAL LENS MAKERS, ETC	39.1422	1451.76	1300	776.57	2.9198
772	GARMENT PATTERN MAKERS, MARKERS, ETC	38.6694	1449.24	1400	697.86	1.9309
906	PRINTERS N.E.C.	38.1335	1437.15	1300	763.22	3.1740
422	FASHION MODELS AND DEMONSTRATORS	37.9835	1418.51	1200	780.71	1.1734
881	PLASTIC MOULDING-MACHINE OPERATORS	37.6420	1416.98	1400	595.53	1.8499
421	WHOLESALE & RETAIL TRADE SALESMEN, ETC	35.7260	1416.61	1300	942.91	6.9048
336	POSTMEN, MESSENGERS, ETC	33.9906	1402.51	1225	612.00	1.4502
798	TOBACCO PREPARERS, ETC	33.8324	1395.00	1455	396.35	-0.9528
797	FOOD PROCESSORS N.E.C.	33.7835	1390.00	1300	705.49	1.7195
601	MASTER FARMERS, ETC	33.3956	1371.53	1000	1523.75	4.9382
872	POTTERS, POTTERY MAKERS, ETC	33.0190	1371.48	1200	768.72	0.9394
891	PAPER & PAPERBOARD PRODUCT MAKERS	32.8672	1351.78	1400	759.21	2.1844
752	WEAVING-& KNITTING-MACHINE SETTERS,ETC	32.6592	1340.20	1200	790.41	2.6806
821	TOOL & DIE MAKERS, ETC	31.4995	1340.16	1200	735.55	1.4260
521	LAUNDERS, DRY-CLEARNERS & PRESSERS	30.1116	1313.73	1300	478.35	0.1424
613	FISHERMEN, & RELATED WORKERS	29.6862	1305.56	1100	1392.75	4.5117
833	WATCH & CLOCK MAKERS & REPAIRERS	29.1734	1297.35	1200	664.27	1.9550
753	WEAVERS & RELATED WORKERS	28.3939	1294.00	1200	567.50	1.3183
921	QUALITY INSPECTORS & TESTERS	27.6769	1276.90	1200	528.83	2.1207
902	BOOKBLINDERS	27.2882	1260.63	1200	537.03	0.3178
512	CHARWORKERS, CLEARNERS, WATCHMEN, ETC	24.3395	1243.42	1200	468.18	0.6949
781	SHOEMAKERS, SHOE REPAIRERS, ETC	21.2126	1226.31	1200	691.68	1.3722
971	LABOURERS N.E.C.	19.4683	1216.83	1200	560.55	0.6121
883	TIRE MAKERS, RUBBER FOOTWEAR MAKERS, ETC	17.6654	1194.54	1100	807.06	2.6311
751	FIBRE PREPARERS	17.1256	1192.71	1200	495.26	1.4395
782	LEATHER GOODS MAKERS	16.7347	1192.43	1100	689.07	1.3656
791	GAIN MILLERS, ETC	16.5868	1169.30	1200	738.07	0.5953
923	MUSICAL INSTRUMENT MAKERS, ETC	16.4747	1161.67	1050	694.00	1.3169
773	KNITTERS & KNITTING-MACHINE OPERATORS	15.8739	1127.50	1100	627.08	1.2100
922	RATTAN FURNITURE & BRUSH MAKERS, ETC	15.2895	1096.50	1100	664.12	0.7856
513	DOMESTIC AMAHS	14.6043	1095.21	1050	372.85	0.7518
844	ELECTRONIC EQUIPMENT ASSEMBLERS	12.8256	1088.23	1000	405.90	3.1319
774	SEWERS, SEWING-MACHINE OPERATORS, ETC	7.9089	1008.80	1000	482.47	0.9571
775	FURNITURE UPHOLSTERERS, ETC	3.5833	985.49	1000	594.43	1.1451
951	HAND PACKERS, MACHINE PACKERS, ETC	2.3341	925.64	900	395.66	0.5470
602	FARM HANDS, POULTRY HATCHERY, ETC	1.5298	923.75	1000	911.73	1.9141
514	BABY-SITTERS	1.2811	921.55	800	580.88	5.2803
882	PLASTIC PRODUCT ASSEMBLERS	0.5865	834.69	832	588.42	2.4627

NOTE : [a] The occupational titles listed are abbreviations. A detailed title list can be found in Census & Statistics Dept., 1981b.

[b] NEC : Not Elsewhere Classified

TABLE 3.3.3. THE DISTRIBUTION OF THE SOCIO-ECONOMIC STATUS SCORE OF OCCUPATIONAL GROUPINGS IN HONG KONG, 1981

CODE	OCCUPATIONAL TITLES	(1) STATUS SCORE	(2) INCOME SCORE	(3) EDUCATION SCORE	(4) STATUS[a] SCORE BY MEDIAN
103	MEDICAL DOCTORS, DENTISTS, ETC	99.8890	99.8341	99.9440	99.7562
109	MEDICAL DOCTORS, DENTISTS, ETC-EMPLOYERS	99.8519	99.9612	99.7427	99.8537
179	LAWYERS, JUDGES, ETC-EMPLOYERS	99.8343	99.9925	99.6761	99.9633
171	LAWYERS, JUDGES, JURISTS & NOTARIES	99.8046	99.9078	99.7013	99.9144
121	TEACHERS IN POST-SECONDARY INSTITUTES	99.7204	99.6136	99.8271	99.7507
201	GOVERNMENT ADMINISTRATORS, ETC	99.6916	99.7548	99.6283	99.8658
202	FOREIGN DIPLOMATS, CONSULS, ETC	98.8064	99.9315	97.6812	99.8658
101	PHYSICAL & LIFE SCIENTISTS	97.8723	96.0846	99.6600	98.2694
113	AIRCRAFT & SHIP OFFICERS	97.4137	99.7030	95.1244	96.6033
111	ARCHITECTS, ENGINEERS, SURVEYORS, ETC	97.3275	96.4172	98.2379	97.9753
124	TEACHERS NOT ELSEWHERE CLASSIFIED	96.6177	95.4350	97.8005	96.9821
301	GOVERNMENT EXECUTIVE OFFICIALS, ETC	96.3845	95.9111	96.8578	97.8331
122	TEACHERS IN SECONDARY SCHOOLS	96.2499	93.2740	99.2258	96.5610
211	GENERAL MANAGERS, ETC	95.9186	97.5558	94.2813	96.5295
151	AUTHORS, JOURNALISTS, & RELATED WORKERS	95.7662	93.9281	97.6044	94.2243
131	ECONOMISTS, STATISTICIANS, ETC	95.5255	93.7553	97.2957	93.1095
174	SOCIAL WORKERS & LABOUR OFFICERS	95.0254	92.5853	97.4656	96.6879
105	PHYSIOTHERAPISTS, PHARMACISTS, ETC	94.9587	92.8588	97.0587	93.3570
132	ACCOUNTANTS & AUDITORS	94.7839	94.2068	95.3610	92.6516
219	GENERAL MANAGERS, ETC-EMPLOYERS	94.3416	99.0822	89.6011	87.1470
173	LIBRARIANS, ARCHIVISTS, & CURATORS	94.2235	91.3318	97.1152	87.1560
175	PROFESSIONAL N.E.C.	94.1959	92.7381	95.6537	93.2113
102	PHYSICAL & LIFE SCIENCES TECHNICIANS	93.5889	90.0131	97.1648	92.6175
104	QUALIFIED NURSES, MIDWIVES, ETC	92.8651	87.0260	98.7042	92.9305
123	TEACHERS IN PRIMARY SCHOOLS, ETC	92.4079	88.5441	96.2717	96.4478
334	AIR TRANSPORT REGULATORY STAFF, ETC	92.2678	91.8738	92.6617	87.2564
112	ENGINEERING TECHNICIANS, ETC	92.0923	91.0144	93.1702	92.0164
409	MANAGERS OF IMPORT & EXPORT-EMPLOYERS	91.5040	98.4908	84.5172	94.1964
335	POSTMASTERS, ETC	91.3868	90.0625	92.7111	89.0928
106	MEDICAL ASSISTANTS, HERBALISTS, ETC	88.0569	85.9185	90.1952	76.9209
402	MANAGERS OF IMPORT & EXPORT	87.8747	95.6471	80.1024	91.5701
312	ELECTRONIC COMPUTER OPERATORS, ETC	86.3333	79.8640	92.8025	79.3377
162	COMPOSERS, MUSICIANS, SINGERS, ETC	85.7088	92.4194	78.9983	84.8434
411	INSURANCE, REAL ESTATE SALESMEN	85.4153	92.1259	78.7047	86.5327
542	FIRE FIGHTERS, PRISON GUARDS, ETC	84.8310	91.5986	78.0634	92.0174
311	STENOGRAPHIC SECRETARIES, TYPIST, ETC	84.4686	77.4616	91.4757	74.2431
172	PROFESSIONAL SPORTMEN, JOCKEYS, ETC	83.7484	91.9165	75.5803	78.7882
332	RAIL TRANSPORT REGULATORY STAFF, ETC	83.6095	88.1106	79.1085	87.2151
161	SCULPTORS, PAINTERS, DESIGNERS, ETC	83.0414	86.6422	79.4405	77.2858
541	POLICEMEN, SECURITY GUARDS, ETC	82.7891	89.4746	76.1035	82.8511
403	SALES SUPERVISORS, ETC	82.3556	87.6332	77.0780	85.7514
408	MANAGERS OF WHOLESALE & RETAIL-EMPLOYERS	81.8325	94.8233	68.8417	78.9020
963	RAIL TRANSPORT EQUIPMENT OPERATORS	80.8536	84.1303	77.5770	82.7472
321	BOOKKEEPERS, BANK TELLERS, ETC	79.8334	72.7828	86.8840	65.6620
851	BROADCASTING STATION OPERATORS, ETC	79.5670	79.9740	79.1599	85.5757
141	RELIGIOUS WORKERS	79.0797	62.3648	95.7946	72.5155
701	PRODUCTION SUPERVISORS & FOREMEN	79.0401	84.9797	73.1006	77.6144
551	TOURIST GUIDES, AIR HOSTESSES, ETC	78.3932	79.0723	77.7141	75.8567
337	TELEPHONE SWITCHBOARD OPERATORS, ETC	77.6599	75.4770	79.8428	68.1308
331	SEA TRANSPORT REGULATORY STAFF, ETC	76.8546	79.7665	73.9426	76.0749
502	HOUSEKEEPERS IN HOTELS & INSTITUTIONS	76.6197	78.7939	74.4454	74.9031
401	MANAGERS OF WHOLESALE & RETAIL	76.0789	90.4003	61.7575	73.2800
333	ROAD TRANSPORT REGULATORY STAFF, ETC	73.8875	75.7143	72.0606	74.6890
342	STOCK CLERKS, PERSONNEL CLERKS, ETC	73.5603	64.7867	82.3339	70.4241
509	MANAGERS OF HOTELS OR REST.-EMPLOYERS	73.0873	95.2768	50.8979	52.8504
501	MANAGERS OF HOTELS OR RESTAURANTS	71.8805	86.2213	57.5398	46.6750
845	TELEPHONE & TELEGRAPH INSTALLERS, ETC	71.6237	69.1277	74.1196	75.1341
341	OFFICE MACHINE OPERATORS, ETC	71.3460	62.4558	80.2362	68.3265
964	ROAD TRANSPORT EQUIPMENT OPERATORS	68.4249	82.0366	54.8132	69.3523
424	SALES WORKERS N.E.C.	68.2611	61.5895	74.9326	72.6020
941	STATIONARY ENGINE OPERATORS	67.4530	62.6724	72.2336	72.5151
343	HOTEL, OFFICE, CLINIC RECEPTIONISTS	66.8751	55.3408	78.4093	72.5865
832	MECHANICAL MACHINE FITTERS & ASSEMBLERS	65.8206	68.3359	63.3052	67.8337
934	INSULATORS, GLAZIERS, & PAPERHANGERS	63.6191	75.2768	51.9613	62.1378
841	ELECTRICAL APPLIANCES MECHANICS	63.2041	56.6072	69.8010	66.3843
711	MINERS & RELATED WORKERS	62.8416	75.6608	50.0224	50.5478
842	ELECTRICAL WIREMEN & REPAIRMEN	62.2520	59.4212	65.0828	70.9451
823	PLUMBERS & PIPE FITTERS	61.0644	70.3533	51.7754	55.8250
903	PHOTOGRAPHIC PRINTERS, ETC	61.0346	49.9328	72.1365	69.0222
901	COMPOSITORS, TYPESETTERS, ETC	60.8564	57.6644	64.0484	65.4931
905	PRINTING PRESSMEN (LETTER-PRESS)	59.9110	57.2796	62.5423	65.5383
843	ELECTRICAL FITTERS & ASSEMBLERS	57.7763	44.7029	70.8496	55.7982
422	FASHION MODELS AND DEMONSTRATORS	56.6182	37.9835	75.2529	44.9244
846	MOTOR-VEHICLE ELECTRICIANS	56.5610	48.9554	64.1666	63.6249
861	JEWELERS, GOLDSMITHS, ETC	56.4466	55.7947	57.0986	51.1013
741	CHEMICAL PROCESSORS & RELATED WORKERS	56.4341	50.4789	62.3893	59.0237

834	SEWING MACHINE MECHANICS, ETC	55.8185	50.3675	61.2695	61.8011
904	PRINTING PRESSMEN (LITHO OFFSET)	55.6185	49.8420	61.3949	64.0955
831	MOTOR-VEHICLES MECHANICS & REPAIRERS	55.2725	46.0045	64.5404	65.3958
336	POSTMEN, MESSENGERS, ETC	54.7022	33.9906	75.4139	53.7632
961	FOREIGN-GOING SHIP EQUIPMENT OPERATORS	54.2414	79.5593	28.9234	65.0536
553	OTHER SERVICE WORKER N.E.C.	54.0033	50.1328	57.8738	50.1738
953	RIGGERS, CRANE OPERATORS, ETC	53.7205	79.2771	28.1640	67.0465
913	SIGN WRITERS & OTHER PAINTERS	52.1783	62.1051	42.2515	58.2445
933	CONSTRUCTION CARPENTERS, JOINERS, ETC	51.7563	76.0246	27.4879	64.1540
421	WHOLESALE & RETAIL TRADE SALESMEN, ETC	51.2882	35.7260	66.8504	52.2646
822	SHEET-METAL WORKERS, COPPERSMITHS, ETC	50.7023	50.9623	50.4423	49.1991
754	BLEACHERS, DYERS, ETC	50.3003	49.2126	51.3880	40.1326
906	PRINTERS N.E.C.	50.1750	38.1335	62.2164	52.7920
921	QUALITY INSPECTORS & TESTERS	49.6828	27.6769	71.6888	51.7239
796	BREMERS, & WINE & BEVERAGE MAKERS	48.2430	45.6399	50.8460	38.1883
761	TANNERS, FELLMONGERS & PELT DRESSERS	48.2155	45.3444	51.0865	31.8705
912	AUTOMOBILE PAINTERS	48.1134	45.2424	50.9844	43.7132
931	BRICKLAYERS, PLASTERERS, ETC	46.8590	67.2721	26.4460	59.0536
801	CABINETMAKERS & RELATED WOOD WORKERS	45.7041	58.8527	32.5556	52.5763
772	GARMENT PATTERN MAKERS, MARKERS, ETC	45.5323	38.6694	52.3952	33.1953
771	TAILORS,FUR TAILORS, & DRESSMAKERS	45.0312	48.6026	41.4598	40.7707
932	REINFORCED CONCRETERS, ETC	44.8595	69.7425	19.9765	61.3541
511	COOKS, HOTEL MAID, WAITERS, ETC	44.4593	53.3001	35.6185	35.4989
937	STONEMASONS	44.2995	70.5181	18.0809	62.3498
824	STRUCTURAL METAL PREPARERS & ERECTORS	44.2425	55.4867	32.9983	49.7886
833	WATCH & CLOCK MAKERS & REPAIRERS	43.8028	29.1734	58.4323	44.5070
911	CONSTRUCTION PAINTERS, ETC	43.3588	58.2135	28.5042	53.1736
962	LOCAL FERRY EQUIPMENT OPERATORS	43.3300	75.1332	11.5268	45.5157
935	WELL DIGGERS, UNDERWATER WORKERS,ETC	43.3264	59.6951	26.9577	58.5384
731	WOOD PREPARATION WORKERS, SAWYERS, ETC	42.3047	57.4819	27.1274	42.9877
611	MASTER FISHERMEN, ETC	42.1571	84.0783	0.2360	35.2368
795	BAKERS, PASTRYCOOKS, ETC	42.1044	45.5189	38.6898	47.1220
612	TOPICAL FISH & GOLD FISH HATCHERS	41.1912	58.4604	23.9220	38.5022
936	SCAFFOLDERS	41.0014	62.5558	19.4471	60.4141
531	BARBERS, HAIRDRESSERS, ETC	40.8823	43.8323	37.9323	29.7750
938	CONSTRUCTION WORKER N.E.C	40.8592	60.5309	21.1876	59.4577
871	OPTICAL LENS MAKERS, ETC	40.5085	39.1422	41.8748	39.8418
792	BUTCHERS, FISH BUTCHERS, ETC	40.1801	57.8706	22.4896	51.8174
965	LIGHTHOUSE OPERATORS, ETC	39.4415	49.7109	29.1720	60.7807
811	STONE CUTTERS & CARVERS	39.1666	50.5379	27.7954	47.7033
794	DAIRY PRODUCT PROCESSORS, ETC	38.1995	43.4533	32.9457	47.0017
872	POTTERS, POTTERY MAKERS, ETC	37.7531	33.0190	42.4872	33.7545
721	METAL PROCESSORS	37.2830	42.9206	31.6454	30.8362
752	WEAVING-& KNITTING-MACHINE SETTERS,ETC	36.8470	32.6592	41.0348	22.1493
793	FOOD PRESERVERS & CANNERS, ETC	36.7866	49.5483	24.0250	46.9007
844	ELECTRONIC EQUIPMENT ASSEMBLERS	36.4192	12.8256	60.0128	37.8338
952	RAILWAY & ROAD VEHICLE LOADERS, ETC	36.2560	47.3773	25.1347	57.5182
821	TOOL & DIE MAKERS, ETC	35.6873	31.4995	39.8751	31.3176
603	FORESTERS, GARDENER & RELATED WORKERS	35.3041	46.4254	24.1829	38.4125
902	BOOKBLINDERS	34.6443	27.2882	42.0004	35.1573
881	PLASTIC MOULDING-MACHINE OPERATORS	34.2139	37.6420	30.7858	41.9426
521	LAUNDERS,DRY-CLEARNERS & PRESSERS	31.7363	30.1116	33.3610	28.1701
798	TOBACCO PREPARERS, ETC	31.6386	33.8324	29.4449	39.6593
552	EMBALMERS AND UNDERTAKERS	30.6008	49.7878	11.4137	34.6614
891	PAPER & PAPERBOARD PRODUCT MAKERS	30.4049	32.8672	27.9427	43.2660
782	LEATHER GOODS MAKERS	27.5875	16.7347	38.4404	25.0770
774	SEWERS, SEWING-MACHINE OPERATORS, ETC	27.0841	7.9089	46.2593	17.3166
797	FOOD PROCESSORS N.E.C.	25.9630	33.7835	18.1426	36.8827
753	WEAVERS & RELATED WORKERS	25.6817	28.3939	22.9695	22.6133
773	KNITTERS & KNITTING-MACHINE OPERATORS	22.9127	15.8739	29.9516	19.8894
923	MUSICAL INSTRUMENT MAKERS, ETC	22.9072	16.4747	29.3397	29.2369
423	STREET HAWKERS, PEDDLERS & NEWSVENDORS	22.4113	40.8073	4.0152	18.1819
781	SHOEMAKERS, SHOE REPAIRERS, ETC	21.6862	21.2126	22.1598	29.0738
883	TIRE MAKERS, RUBBER FOOTWEAR MAKERS, ETC	20.6474	17.6654	23.6294	29.2482
971	LABOURERS N.E.C.	18.0060	19.4683	16.5438	43.7831
791	GAIN MILLERS, ETC	17.9782	16.5868	19.3695	29.4472
601	MASTER FARMERS, ETC	16.9971	33.3956	0.5986	6.8021
512	CHARWORKERS, CLEARNERS, WATCHMEN, ETC	16.4215	24.3395	8.5034	13.6568
751	FIBRE PREPARERS	15.2838	17.1256	13.4421	21.8053
613	FISHERMEN, & RELATED WORKERS	14.8976	29.6862	0.1090	13.7587
922	RATTAN FURNITURE & BRUSH MAKERS, ETC	14.1964	15.2895	13.1033	30.2664
775	FURNITURE UPHOLSTERERS, ETC	11.1774	3.5833	18.7714	21.6421
951	HAND PACKERS, MACHINE PACKERS, ETC	8.3477	2.3341	14.3613	24.7730
513	DOMESTIC AMAHS	8.0747	14.6043	1.5452	12.4360
882	PLASTIC PRODUCT ASSEMBLERS	6.5101	0.5865	12.4336	20.2794
514	BABY-SITTERS	6.5101	1.2811	11.7390	8.0890
602	FARM HANDS, POULTRY HATCHERY, ETC	1.9088	1.5298	2.2877	7.2872

[a] The computation of the scores is based on the medians of educational and income levels of each occupational grouping, further explanation can be found in the text.

4. DISCUSSION

Based on the socioeconomic status scores of the 153 occupational groupings in Hong Kong constructed in this chapter, we can now verify Hypothesis 1 of this study which states that there is a wide range of variations in market situations among economic classes in Hong Kong. There are several well-known measures of dispersion or range of variations, two of which, namely range and standard deviation, will be employed in the following explication.

First, we can learn from Table 3.1.5. that the range of the socioeconomic status scores of these occupational groupings is 97.9802, which is the difference between the highest score, 99.8690, and the lowest score, 1.9088. With the scores, by definition, ranging from 0 to 100, a range with a value of 97.9802 is by all means a wide range, thus it may be taken as one of the evidences confirming the validity of Hypothesis 1. However, we can further our verification by dividing the socioeconomic status score into its two constituent parts, namely the income and educational levels. For educational level, the range of the education scores is 99.835, with the highest score of 99.9440 and the lowest 0.1090. In terms of absolute value, the lowest education-level average is 4.53247 years, while the highest average is 18.3953. There is a difference of 13.8628 years of education between the most learned occupational grouping, which consists of " medical doctors, dentists and veterinarians", and the least educated, which consists of "fishermen, fish hatchers, fish farmers, oyster culturists and related workers". As for income level, the range of the scores is 99.406, with the highest score of 99.9925 and the lowest 0.5865. In terms of money value, the lowest income group, which is "the plastic product assemblers", earns on average only 834.69 dollars per

month; while the highest income grouping, which consists of "lawyers, judges, jurists and notaries who are employers", earns 30,749.9 dollars per month on average. In other words, the lawyers and their fellow incumbents earn on average 29,914.31 dollars more than the plastic product assemblers monthly.

Second, we can approach the problem by means of another measure of dispersion, that is standard deviation. The standard deviation of the status scores is 26.8365, while the mean is 58.698. Thus the coefficient of variation is 45.7197%. 61.438% of the occupational groupings fall within the area of plus and minus one standard deviation unit, while 99.347% of the cases lie within the area of plus and minus two standard deviation units. In other words, 0.653% of occupational groupings lie beyond the area of plus and minus two standard deviation units. As for the income scores, the standard deviation is 27.7894, the mean is 60.8855, and the coefficient of variation is 45.642%. 58.170% of the cases fall within the area of plus and minus one standard deviation unit, 96.732% lie within the area of plus and minus two units, and 3.2680% of the cases fall beyond the area of plus and minus two units. For the distribution of the education scores, the standard deviation is 29.9665, the mean is 56.5106, and the coefficient of variation is 53.0281%. 58.170% of the cases fall within the area of plus and minus one standard deviation unit, and all cases lie within the area of plus and minus two units. These statistics suggest that the status scores, as well as the education scores and income scores, spread quite widely about the mean.

In conclusion, the socioeconomic index has suggested, on one hand, that among the 153 occupational groupings, there are wide variations on the education qualifications which the incumbents of the occupations have brought with them to the balancing encounter in the labor

market. On the other hand, the returns they earn from performing the occupational roles and subsequently their purchasing power in the commodity market also differ greatly. Thus, the distribution of socioeconomic status scores of occupational groupings confirms that there are apparent differentials in the market situations among economic classes in Hong Kong.

CHAPTER 4

IN SEARCH OF A CLASS STRUCTURE

In Chapter Three we demonstrated how the socioeconomic status scores of occupational groupings in Hong Kong vary. These statistics show how the economic classes differ in their market capacities in both the labor and commodity markets. In this chapter we will investigate whether these variations in market situations will constitute social closures among which mobility opportunities are conditioned and whether the economic classes will "structurate" into social classes. Through this investigation we will verify the second hypothesis of this study.

Hypothesis 2 *The economic classes in Hong Kong cluster together in a way to form a limited number of social classes.*

According to the theoretical exposition presented in Chapter One, we have learnt that we can measure the relative mobility chances among classes by means of mobility table analysis and, in particular, the loglinear modeling method. However, if we are to make use of that method, we must first construct a mobility table. More specifically, we must identify the class categories, which constitute the rows and columns of a mobility table. According to the Market- or Production-Relational perspectives in class study, these categories should also be related in a way that they form a theoretically meaningful "relational network". Therefore, in this chapter, we will begin with identifying the class categories which will constitute the mobility table to be analyzed. Then, a variety of mobility models will be tested in order to substantiate the model which fit with the data of Hong Hong. Subsequently, it is hope that

the class structure of Hong Kong will emerge.

1. IDENTIFYING THE CLASS CATEGORIES

To begin with, let us look at two widely accepted schemata of such class categories in the U.S. and U.K.. In the United States, Duncan has developed a 17-category schema based on the occupational categories prepared by the U.S. Bureau of the Census (Duncan, 1967:23-27). This schema has become the basis of mobility table analysis in the U.S.[1] In the United Kingdom, the Oxford Social Mobility Group has derived a 7-category schema based on the *Classification of Occupations 1970* released by the Office of Population Census and Survey (Hope, 1972; Goldthorpe, 1987:40-43; Halsey, 1980:17-19). We have juxtaposed the two schemata in Table 4.1.1..

We can see that a number of relational perspectives are running through these schemata. First, we can find classification by ownership of property or capital, such as the property and the propertyless, in Weberian terminology, or the bourgeoisie and the proletariat, according to Marxist conceptions. Second, we can reveal classification based on marketable knowledge and skills, for instance, the professionals, the technocrats, and clerical workers. Third, demarcation based on the hierarchy of authority in the workplace can also be detected, for example, managers and administrators, supervisors and foremen, and laborers. Fourthly, classification by industries is also used in the schemata, such as manufacturing and construction workers, service and sales workers, and agricultural workers. Taken together, these criteria of classification present a comprehensive schema of class demarcation which takes into

account both the Market- and Production-Relational perspectives advocated by Weberians and Marxists respectively.

Table 4.1.1. *Comparison between Duncan's 17-category Class Schema and the 7-category Class Schema of the Oxford Social Mobility Group.*

Duncan's 17-category Class Schema	The 8-category Class Schema of the Oxford Social Mobility Group
1. Professionals, self-employed	1. Higher-grade professionals, administrators, managers, and proprietors.
2. Professional, salaried	
3. Managers	2. Lower-grade professionals, administrators, and managers. Supervisors, and higher-grade technicians.
4. Salesmen, other	
5. Proprietors	
6. Clerks	3. Clerical, sales and rank-and-file service workers.
7. Salesmen, retail	4. Small proprietors and self-employed artisans. The petty-bourgeoisie.
8. Craftsmen, manufacturing	
9. Craftsmen, other	5. Lower-grade technicians and foremen. The 'aristocracy of labour'.
10. Craftsmen, construction	6. Skilled manual workers in industry.
11. Services	7. Semi-skilled manual workers in industry, and Agricultural workers.
12. Operatives, other	
13. Operatives, manufacturing	
14. Labourers, manufacturing	
15. Labourers, other	
16. Farmers	
17. Farm Labourers	

Sources : Duncan, 1967:27; and Goldthorpe, 1987:40-45.

With reference to these schemata and their underlying theoretical perspectives and the occupational classification formulated by the Hong Kong Census and Statistics Department in the 1981 census, we can now construct the class schema to be used in the mobility table analysis in this study. The Hong Kong Census and Statistics Department has grouped occupations into 8 major groups in the 1981 census, as presented in Table 4.1.2. As pointed out before, the occupational classification designed by the Hong Kong Census and Statistics Department has neglected some essential criteria in class demarcation, such as ownership of capital or hierarchy of authority in workplace. Therefore, in order to incorporate these criteria into the analysis, we have extended the occupational classification into a 14-category schema, as presented in Table 4.1.2.. The rationale behind the reconstruction is as follows:

(1) In order to incorporate the "employing class" or the bourgeoisie into the schema, we break down both Group 1 and 2 in the classification of the Census and Statistics Department into the employing and the employed classes respectively, as we have done in the previous section.

(2) We also build into the schema an "intermediate class" in the hierarchy of authority in the work place which has been underlined by such Neo-Marxists as E.O. Wright, (cf. Table 1.1.3.) and the two schemata constructed by both Duncan and the Oxford Social Mobility Group. This intermediate class is represented by the category of Supervisors and Foremen, which consists mainly of supervisory workers in the sales, service and manufacturing sectors. More specifically, it is made up of three occupational groups in the Census classification, that is, the 3-digit coded sub-groups 403, 502, and 701 in the 1981 census

coding manual (Census & Statistic Dept., 1981b).

(3) We also refine Groups 4 and 5 in the Census and Statistics Department's classification by singling out the Hawkers (code 423) and the Domestic Helpers (codes 513 and 514) from the Sales workers and the Service workers respectively.

(4) The Census and Statistics Department includes more than half of the 3-digit coded occupational groupings together under a single title "Production and related workers, Transport Equipment Operators and Labourers", that is group 7/8/9 in the coding manual. With reference to occupational classifications of the U.S. Bureau of the Census and that of Duncan's, we break Group 7/8/9 into three Classes. They are (i) the category of *Technicians and Craftsmen*, which consists of occupational groupings 801 to 938 except 851, 881, 882, and 883 in the coding manual, (ii) the category *Operative Workers*, which is made up of occupational groupings 941 to 965 and 851 and 881; and (iii) the category of *Manufacturing Labourers* includes all the remaining occupational groupings in Group 7/8/9, which are mainly manual labourers in the manufacturing sector.

(5) Finally, we exclude Group 0, which consists mainly of the armed forces and economically inactive persons, because this study is confined to the civilian labour force as are most of the mobility studies.

Apart from identifying the class categories which constitute the rows and columns of the mobility table, we also have to rank the respective categories in descending order so as to be able to analyze the upward or downward direction of the mobility. One of the ways to rank these categories is to array them by their income and educational levels

Table 4.1.2. *Comparison of Major Occupational Groupings Classified in the 1981 Census and in this Study.*

Code	Major Occupational Groupings[a] Classified by Hong Kong Census and Statistics Dept.	Class Category	Major occupational Groupings[b] used in this Study
1	Professional, Technical and related workers	1	Professional, Technical & related workers --- Employers
		2	Professional, Technical & related workers --- except Employers
2	Administrative and Managerial workers	3	Administrative and Managerial workers --- Employers
		4	Administrative and Managerial worker --- except Employers
		5	Supervisors and Foremen
3	Clerical and related workers	6	Clerical and related workers
4	Sales workers	7	Sales workers --- except Hawkers
		12	Sales workers --- Hawkers
5	Service workers	10	Service workers --- except Domestic Helpers
		14	Service workers --- Domestic Helpers
6	Agricultural workers and Fisherfolks	13	Agricultural workers and Fisherfolks
7/8/9	Production and related workers Transport Equipment Operators and Labourers	9	Technicians and Craftsmen
		8	Operative workers
		11	Manufacturing Labourers
0	Arm Forces and Unclassifiable		

[a] Source : Census and Statistics Department, Hong Kong, 1981b:34.
[b] Explanation can be found in the text.

(Duncan, 1967:27; and Featherman & Hauser, 1978:25-37). As the socio-economic index constructed in the previous section is based on the means of income and educational levels of each occupational group, therefore, in the present study, we can rank the 14 class categories by their average socio-economic status scores. The result of the ranking is presented in Table 4.1.3.

The ranking of the 14 class categories basically follows the magnitude of their average status scores. However there is one exception, that is the relative rankings of Class 3 and Class 4. We rank the Administrative and Managerial workers who are employers (i.e. Class 3) higher than their fellow incumbents of the same occupation but who are not employers (i.e. Class 4) disregarding the fact that the average status score of the latter is higher than that of the former. We think that our maneuver is theoretically and empirically well grounded. First, the difference between the two scores is only 0.71. Furthermore, when we look at the average educational levels, we can see that the difference in score is mainly due to the fact that the employed managers are more educated than their employing counterparts. Third, in terms of income level, the employing managers are in fact better off than their learned fellow incumbents. Lastly, both the Weberian and Marxist perspectives contend that, theoretically, the property class or the bourgeoisie would occupy a higher position than the managers and administrators who have to sell their labour in the market. Thus, the following mobility analysis will begin with a mobility table made up of 14 categories which will be ranked in accordance with the order shown in Table 4.1.3..

TABLE 4.1.3. Ranking of 14 Class Categories by Socioeconomic Status Scores, for Hong Kong Labour Force in 1981.

CLASS	SESCORX2		MAINEARN		EDUYEARS	
	MEAN	STD	MEAN	STD	MEAN	STD
1 Professional, Technical & related Workers---Employers	94.10	6.30	13727.22	17394.81	16.43	2.96
2 Professional, Technical & related workers---except Employers	93.08	4.64	3938.09	4035.25	15.48	2.73
3 Administrative & Managerial workers---Employers	88.21	6.63	6186.05	10330.07	11.68	4.26
4 Administrative & Managerial workers---except Employers	88.92	9.89	5411.63	6752.36	13.03	4.28
5 Supervisors & Foremen	79.81	1.90	2398.24	2105.38	11.07	3.55
6 Clerical & related workers	77.78	5.84	1835.14	940.64	13.03	2.11
+ 7 Sales workers---except Hawkers	57.01	10.90	1656.98	1869.45	10.30	3.63
8 Operative workers	48.89	22.05	1730.71	803.39	8.31	3.71
9 Technical & Craftsmen	47.85	10.96	1536.21	799.75	8.79	3.56
10 Service workers ---except Domestic Helpers	36.47	22.11	1610.74	1126.38	7.81	4.26
11 Manufacturing Labourers	26.09	10.62	1165.73	635.89	7.91	3.64
12 Sales Workers---Hawkers	22.41	0.00	1480.26	1635.07	6.14	4.25
13 Agricultural workers and Fisherfolks	16.21	10.09	1307.34	1404.40	5.54	4.57
14 Service workers ---Domestic Helpers	7.84	0.56	1068.65	416.19	5.84	5.59

NOTE : Computed with a 20% Sample of the 1981 Hong Kong Census Data.

2. 14 x 14 MOBILITY TABLE ANALYSES

With the 14-category class schema, we can now construct a 14 x 14 mobility table. As pointed out in Chapter Two, the mobility table is constructed with *the family data set* which is a 5% sample from the 1981 Hong Kong census data and consists of sons and daughters who were 15 to 27 in 1981. Thus the table that is to be constructed reflects only the early career of the sons and daughters, or in Duncan's words, it is "a table showing a cross-classification of origin by destination status of the cohorts included in the study" (Duncan, 1966:62-63). Table 4.2.1. presents the observed frequencies of this table of origin by destination.

Based on the mobility table, we can now set out to verify whether the mobility chances are conditioned in such a way that intra-category mobility is easy and typical while inter-category mobility is difficult and rare; in other words, whether social closure and social class exist in Hong Kong society.

(a) The Perfect Mobility Model :

One of the conventional ways to start is with the perfect-mobility model (Goodman, 1965, 1969a & b; Hauser et al., 1975a; Hout, 1983). It is basically a null hypothesis of the social closure thesis, which assumes that there is no social closure or no interaction between origin and destination, that is fathers' and sons' class categories are statistically independent of each other. We test this hypothesis by means of the log-linear modeling technique. In Table 4.2.2. estimates of expected frequencies of the independent model are presented. By contrasting these

TABLE 4.2.1. : *Observed Frequencies of Father's Class Position by Son's or Daughter's Early Class Position in Hong Kong, 1981.*

FATHER'S OCCUPATION	SON'S OR DAUGHTER'S OCCUPATION														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	TOTAL
1	0	9	0	0	1	6	1	0	2	3	4	0	0	0	26
2	0	51	1	11	6	96	19	8	52	24	39	1	0	0	308
3	2	65	10	26	49	204	74	16	81	52	107	9	2	0	697
4	4	67	2	25	25	213	49	19	83	50	59	6	0	0	602
5	0	52	2	9	45	233	33	26	123	65	94	1	2	0	685
6	0	100	2	23	33	438	47	30	135	64	114	2	2	0	990
7	0	48	1	6	16	231	88	26	174	60	153	3	2	0	808
8	0	118	3	23	48	578	129	215	677	197	598	20	2	3	2611
9	0	142	2	21	65	644	105	141	1211	280	855	13	6	3	3488
10	0	197	4	27	72	739	177	200	989	532	892	9	9	5	3852
11	2	133	1	12	65	585	103	155	693	216	954	11	2	2	2934
12	0	70	5	14	34	260	104	114	359	137	358	125	8	1	1589
13	0	17	0	4	4	62	16	49	210	65	198	4	81	2	712
14	0	9	1	4	2	18	3	4	3	2	8	1	0	0	55
TOTAL	8	1078	34	205	465	4307	948	1003	4792	1747	4433	205	116	16	19357

Source : computed from a 5% sample of the 1981 Hong Kong Census Data.

TABLE 4.2.2. : *Expected Frequencies under Perfect Mobility Model from Father's Class Position to Son's or Daughter's Early Class Position in Hong Kong, 1981.*

FATHER'S OCCUPATION	SON'S OR DAUGHTER'S OCCUPATION													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	.01	1.45	.05	.28	.62	5.79	1.27	1.35	6.44	2.35	5.95	.28	.16	.02
2	.13	17.15	.54	3.26	7.40	68.53	15.08	15.96	76.25	27.80	70.54	3.26	1.85	.25
3	.29	38.82	1.22	7.38	16.74	155.08	34.14	36.12	172.55	62.91	159.62	7.38	4.18	.58
4	.25	33.53	1.06	6.38	14.46	133.95	29.48	31.19	149.03	54.33	137.87	6.38	3.61	.50
5	.28	38.15	1.20	7.25	16.46	152.41	33.55	35.49	169.58	61.82	156.87	7.25	4.10	.57
6	.41	55.13	1.74	10.48	23.78	220.28	48.48	51.30	245.08	89.35	226.72	10.48	5.93	.82
7	.33	45.00	1.42	8.56	19.41	179.78	39.57	41.87	200.03	72.92	185.04	8.56	4.84	.67
8	1.08	145.41	4.59	27.65	62.72	580.96	127.87	135.29	646.38	235.65	597.95	27.65	15.65	2.16
9	1.44	194.25	6.13	36.94	83.79	776.09	170.82	180.73	863.49	314.80	798.80	36.94	20.90	2.88
10	1.59	214.52	6.77	40.79	92.53	857.08	188.65	199.59	953.60	347.65	882.16	40.79	23.08	3.18
11	1.21	163.40	5.15	31.07	70.48	652.83	143.69	152.03	726.34	264.80	671.92	31.07	17.58	2.43
12	.66	88.49	2.79	16.83	38.17	353.56	77.82	82.34	393.37	143.41	363.90	16.83	9.52	1.31
13	.29	39.65	1.25	7.54	17.10	158.42	34.87	36.89	176.26	64.26	163.06	7.54	4.27	.59
14	.02	3.06	.10	.58	1.32	12.24	2.69	2.85	13.62	4.96	12.60	.58	.33	.05

TABLE 4.2.3. : *Adjusted Residuals under Perfect Mobility Model from Father's Class Position to Son's or Daughter's Early Class Position in Hong Kong, 1981.*

FATHER'S OCCUPATION	SON'S OR DAUGHTER'S OCCUPATION													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	-.1038	6.4628	-.2140	-.5279	.4812	.1014	-.2486	-1.1928	-2.0173	.4475	-.9127	-.5279	-.3962	-.146
2	-.3597	8.4778	.6296	4.3421	-.5248	3.7934	1.0422	-2.0625	-3.2271	-.7612	-4.3108	-1.2692	-1.3736	-.5088
3	3.2494	4.4049	8.0852	7.0169	8.1271	4.5370	7.1261	-3.5011	-8.1832	-1.4682	-4.8313	.6100	-1.0881	-.7734
4	7.6418	6.0440	.9321	7.5336	2.8498	7.8698	3.7446	-2.2777	-6.3348	-.6259	-7.7714	-.1519	-1.9354	-.7169
5	-.5419	2.3499	.7403	.6634	7.2523	7.5373	-.0987	-1.6663	-4.1984	.4314	-5.8210	-2.3770	-1.0610	-.7665
6	-.6568	6.3835	.2034	3.9892	1.9642	17.0791	-.2245	-3.1350	-8.3220	-2.8864	-8.7527	-2.7044	-1.6625	-.9290
7	-.5904	.4705	-.3598	-.8978	-.8004	4.4254	8.0644	-2.5726	-2.1673	-1.6208	-2.7405	-1.9510	-1.3234	-.8352
8	-1.1171	-2.5147	-.7970	-.9562	-2.0231	-.1496	.1099	7.5664	1.4929	-2.8378	.0024	-1.5728	-3.7204	.6163
9	-1.3263	-4.2607	-1.8429	-2.9120	-2.2948	-5.9390	-5.7037	-3.3523	15.0575	-2.2710	2.5013	-4.3735	-3.6108	.0761
10	-1.4101	-1.3754	-1.1892	-2.4261	-2.4143	-5.1111	-.9718	.0329	1.4767	11.5824	.4217	-5.5917	-3.2851	1.1376
11	.7765	-2.6566	-1.9881	-3.7344	-.7175	-3.2684	-3.7791	.2688	-1.5482	-3.4133	13.4548	-3.9302	-4.0466	-.2965
12	-.8460	-2.1114	1.3813	-.7235	-.7133	-5.8898	3.1763	3.7405	-2.0852	-.5857	-.3677	27.6698	-.5165	-.2856
13	-.5528	-3.7718	-1.1405	-1.3207	-3.2679	-8.8523	-3.3388	2.0857	2.9850	.0987	3.1754	-1.3207	37.9644	1.8755
14	-.1510	3.4959	2.9132	4.5082	.5986	1.8707	.1917	.7007	-3.3213	-1.3967	-1.4768	.5508	-.5767	-.2136

Goodness-of-Fit test statistics

Likelihood Ratio Chi Square = 2790.97795 DF = 169 P = 4E-32

Pearson Chi Square = 4466.24705 DF = 169 P = 4E-32

Index of Dissimilarity = 0.120

expected frequencies with the observed frequencies in Table 4.2.1., we can decide whether the independent model fits with the data. According to the goodness-of-fit statistics shown at the bottom of Table 2.2.3., the likelihood ratio chi square is 2790.97795, with 169 degrees of freedom. According to the chi-square distribution, the null hypothesis of perfect mobility is rejected with a huge margin. On the other hand, the index of dissimilarity [2] of the model is 0.120, meaning the perfect mobility model misplaced 12% of the cases in the table.

However, though the overall model is rejected, we can still continue our investigation into the phenomenon of immobility or class inheritance by looking into the residuals of the model.[3] By residual, I mean the difference between the observed and expected frequencies of each respective cell in the mobility table. For purpose of comparison, standardized residuals can be "obtained by dividing each residual by the square root of the expected count" (Norusis, 1985:330). Furthermore, adjusted residuals can also be "calculated by dividing each standardized residual by an estimate of its standard error" (Norusis, 1985:330). The rule of thumb for the residual evaluation is that if an adjusted residual is larger than 2 in absolute value, the residual will basically be accepted as statistically significant at 0.05 level (Norusis, 1985:330). The adjusted residuals of the perfect mobility model, presented in Table 4.2.3., yield strong evidence to support our suspicion that there is immobility or class inheritance prevailing in the social structure of Hong Kong.

(1) Most of the adjusted residuals in the diagonals (12 out of 14, except $Cell_{1\ 1}$ and $Cell_{14\ 14}$), which conventionally signify the immobility or inheritance of class positions between fathers and their children, are significantly large and positive in value.

This indicates that sons and daughters have much higher chances to inherit their fathers' class positions than they would have had in a perfectly mobile class structure.

(2) The thesis of immobility can further be supported by the fact that 10 of these diagonal residuals are of the highest values across the rows or columns that they are in. In fact, it is a common understanding in mobility table analysis that the rows of a mobility table represent the "outflow" frequencies of particular origins, while the columns of the table represent the "inflow" counts of particular destinations (Hout, 1983:11-12). This means that, on one hand, young men and women from these 10 origins "enjoy" the highest probability to follow their fathers' class positions than to "outflow" into the other 13 destinations. On the other hand, it also indicates that youths who "inflow" into each of these 10 destinations are most likely to be from the same class origins.

(3) The data also reveal that the phenomenon of immobility is more likely to happen to the lower classes. The two highest positive residuals across the entire table are those of $Cell_{12\ 12}$ and $Cell_{13\ 13}$. Furthermore, the residuals of the diagonals from Classes 8 to 13 are all positive in value and larger than 10, which are larger than most (except, $Cell_{6\ 6}$) of the residuals across the entire table.

(4) In addition to the relative mobility opportunities among different class categories, the distribution of the adjusted residuals also provides essential information to the direction of the social mobility. A conventional interpretation in mobility table analysis is to take the upper right off-diagonal cells as

downward mobility, and the lower left of the off-diagonal cells as upward mobility. We can notice from Table 3.2.3. that young men and women from the origins of professional and managerial classes, that is Classes 1 to 4, are less likely to move downward into the manual working classes, that is Class 8 or below. This is because most of the respective residuals (i.e. the sub-table of rows 1-4 by columns 8-14) are negative in value and the only two positive values are negligible. On the other hand, youths from working class origins (i.e. Classes 8 to 13) have less opportunities to move upward to become white collar workers (i.e. Classes 1 to 6). The data show that of the 24 residuals (i.e. the sub-table of rows 10-13 by columns 1-6), 20 of them are negative in value, while the two positive residuals are insignificant. Therefore, the data suggest that there are constraints which prevent the upper classes from long distant downward mobility and restrict the lower classes from far-ranging upward mobility.

(5) Finally, the data suggest that Classes 1 and 14 seem to be inappropriate categories in the present study, because nearly half of the cells relating to these two categories (25 out of 52) are empty. Thus, the estimates relating to these categories and cells are a bit unreliable for any induction or inference. However, in my opinion, the inappropriateness of these two categories is only idiosyncratic to the present study. It is mainly due to the nature of the data used in constructing the mobility table under study. Since the data include only sons and daughters who were aged 15 to 27 in 1981, that is in their early career, it is natural that not many employing professionals (i.e. Row 1) appear in the table. If we look at the career patterns of

most of the professionals, we can see that it is not easy to become an employing professional in one's mid-twenties considering the years of education required and the capital needed to start one's own business. On the other hand, the inappropriateness of Class 14 (i.e. domestic service workers) is mainly due to the fact that not many local youths would prefer a career as domestic helpers and the vacancies have been filled by imported labourers, mainly from the Philippines. Besides, domestic service workers are mainly female, thus it seems quite natural that we cannot find many fathers who are incumbents of the occupation. Thus, in the following analyses, we will merge these two class categories with other categories.

In conclusion, the analysis postulates that the ideal model of perfect mobility does not fit with the objective reality of the social structure. Furthermore, there are considerable evidences suggesting that immobility or class inheritance seems to prevail in quite a number of class categories. Taken together, the results suggest that we can pursue our investigation in two directions. One is to go on exploring the phenomenon of class inheritance with the 14 x 14 table. The other is to collapse some of the class categories in the 14 x 14 table so as to search for the appropriate clusters of categories which fit with the structure of Hong Kong society. We will begin with the former exploration first.

(b) The Quasi-Perfect Mobility Model:

The quasi-perfect mobility model is the most commonly used model in detecting immobility or class inheritance in mobility analysis (Goodman, 1965; Hout, 1983:18-23; Pullum, 1975:70-93; and Hauser, et al., 1975a & b). The model assumes the existence of immobility and postulates that it is the cause of most of the residuals in the log-linear model. It also assumes that perfect mobility may prevail in the off-diagonal cells. The method to verify these assumptions is to "block out" the diagonals (i.e. assign a zero count to the diagonals) in the log-linear model and to test the model of perfect mobility against the off-diagonal cells.

Accordingly, the quasi-perfect mobility model was run, yielding the results in Table 4.2.4.. The likelihood ratio chi square equals 1164.3686 with 157 degrees of freedom, hence the quasi-perfect mobility model does not fit with the data. However, in comparison with the perfect mobility model, the quasi-perfect mobility model is definitely an improvement. First of all, the index of dissimilarity of the quasi-mobility mobility model is 0.072, that is it misplaced only 7.2% of the cases in the table, while the perfect mobility model misplaced 12%. Furthermore, the likelihood ratio chi square of the quasi-perfect mobility model is also much smaller than that of the perfect mobility model. In fact, it has been suggested by Goodman (1970) and Hauser and his colleagues (Hauser et al., 1975a) that we can take the perfect mobility model as the baseline model and the value of its likelihood ratio chi square (=2790.97795)as the total variation in the data that we wish to explain (=100%)by the subsequent models. We can then compare the two models by saying that the quasi-perfect mobility model accounts for only 41.72% (1164.37/2790.98) of the variation in the baseline model.

TABLE 4.2.4. : *Expected Frequencies under Quasi-Perfect Mobility Model from Father's Class Position to Son's or Daughter's Early Class Position in Hong Kong, 1981.*

FATHER'S OCCUPATION	SON'S OR DAUGHTER'S OCCUPATION													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	0.00	1.54	.04	.27	.64	5.95	1.33	1.36	6.38	2.26	6.01	.13	.05	.02
2	.12	51.00	.39	2.89	6.76	62.54	13.94	14.27	67.01	23.74	63.19	1.35	.56	.25
3	.31	40.74	10.00	7.27	17.04	157.50	35.10	35.93	168.75	59.79	159.13	3.41	1.42	.62
4	.26	34.53	.83	25.00	14.44	133.50	29.75	30.46	143.04	50.68	134.89	2.89	1.20	.53
5	.30	38.86	.93	6.93	45.00	150.23	33.48	34.27	160.97	57.03	151.79	3.25	1.35	.60
6	.33	42.39	1.01	7.57	17.73	438.00	36.52	37.39	175.59	62.21	165.59	3.55	1.48	.65
7	.34	44.93	1.08	8.02	18.79	173.69	88.00	39.62	186.10	65.94	175.49	3.76	1.56	.69
8	1.15	149.70	3.58	26.71	62.60	578.73	128.97	215.00	620.08	219.70	584.74	12.53	5.21	2.30
9	1.37	178.65	4.28	31.88	74.71	690.67	153.91	157.56	1211.00	262.20	697.85	14.95	6.22	2.74
10	1.65	215.31	5.15	38.42	90.04	832.37	185.49	189.89	891.84	532.00	841.02	18.02	7.49	3.30
11	1.17	152.53	3.65	27.22	63.79	589.66	131.40	134.52	631.79	223.85	954.00	12.76	5.31	2.34
12	.67	87.12	2.09	15.55	36.43	336.82	75.06	76.84	360.88	127.86	340.32	125.00	3.03	1.34
13	.29	37.44	.90	6.68	15.66	144.75	32.26	33.02	155.09	54.95	146.25	3.13	81.00	.57
14	.02	3.26	.08	.58	1.36	12.59	2.81	2.87	13.49	4.78	12.72	.27	.11	0.00

Goodness-of-Fit test statistics
Likelihood Ratio Chi Square = 1164.36860 DF = 157 P = 4E-32
Pearson Chi Square = 1302.94785 DF = 157 P = 4E-32

Index of Dissimilarity = 0.072

Therefore, the "goodness-of-fit" of the analysis has improved substantially.

In conclusion, the 14 x 14 mobility table analysis verifies that the ideal model of perfect mobility is far from the reality prevailing in the social structure of Hong Kong. Furthermore, by looking into the distribution of the residuals of the model, we notice that, on one hand, immobility or class inheritance is a prominent phenomenon in Hong Kong society and, on the other, most of the offspring of upper classes are well protected from falling too far down along the social hierarchy, while most young men and women from lower classes are contained from far-ranging upward mobility. Third, in order to verify the class inheritance thesis, the quasi-perfect mobility model is tested against the data. Though the overall model does not fit with the data in terms of the likelihood ratio chi square, the quasi-perfect mobility model fits with the data much better than the perfect mobility model.

3. 10 x 10 MOBILITY TABLE ANALYSES

According to the Weberian conception of social class, in a social class structure, a limited number of social closures are constituted to guarantee similar mobility chances for members of each social class. In the 14 x 14 mobility table analysis in the previous section, we were unable to find an overall structure of such social closure. However, we did reveal some discrepancy on mobility opportunities among the 14 class categories. Therefore, we can further our search for social closures by grouping together the 14 class categories which share similar mobility

opportunities to reduce the number of categories in the table and the residuals of the model. Subsequently, we hope to attain a model that fits with the data.

In this section, we will construct and analyze a 10 x 10 mobility table. In comparison with the conventional practice in the mobility table analysis, which usually collapses the categories into five or less, (Blau & Duncan, 1967:58; Hauser et al., 1975a & b; Pullman, 1975: 104-115; Featherman and Hauser, 1978:28; Hope, 1972:179; and Goldthorpe, 1987:69-93) the 10-category table would seem to be a middle range model (Pullman, 1975:90). One of the reasons for not directly analyzing a mobility table with more restricted number of categories, say five or less, is that in the 14 x 14 table, we have revealed that both Class 1 and Class 14 are inappropriate categories for the data under study. We then suggest the two categories should collapse with other related classes for further analysis. Furthermore, it is one of the objectives of the present study to contrast the analysis results of mobility tables which consist of both sons and daughters and that of sons only. However, we are unable to run the log-linear model with data consisting only of fathers and sons because there are too many empty cells in the 14 x 14 table. Therefore, an intermediate analysis with the 10 x 10 table is necessary.

The 10-category class schema to be used to construct the table is presented in Table 4.3.1.. In contrast with the 14-category schema, the new schema has only made some adjustments at the two extremes of the hierarchy. On one extreme, the two employing classes are combined with their fellow incumbents of the same trades, while on the other extreme, the three lowest categories are collapsed into a category which more or less contains the unskilled manual labourers. The reason for such combinations is that they are congruent not only with the the general

structure of division of labour but also the overall ranking of the categories in Table 4.3.2.

Table 4.3.1. Comparison between the 14-Category Class Schema with the 10-Category Class Schema.

14-Category Class Schema	10-Category Class Schema
1 Professional, Technical and related workers --- Employers	
2 Professional, Technical and related workers --- except Employers	1 Professional, Technical and related workers
3 Administrative and Managerial workers --- Employers	
4 Administrative and Managerial workers --- except Employers	2 Administrative and Managerial workers
5 Supervisors and Foremen	3 Supervisors and Foremen
6 Clerical and related workers	4 Clerical and related workers
7 Sales workers --- except Hawkers	5 Sales workers --- except Hawkers
8 Operative workers	6 Operative workers
9 Technicians and Craftsmen	7 Technicians and Craftsmen
10 Service workers --- except Domestic Helpers	8 Service workers --- except Domestic Helpers
11 Manufacturing Laborers	9 Manufacturing Laborers
12 Sales workers --- Hawkers	
13 Agricultural workers and Fisherfolk	10 Unskilled Manual Labourers
14 Service workers --- Domestic Helpers	

TABLE 4.3.2. Ranking 10 Class Categories by Socioeconomic Status Scores, for Hong Kong Labour Force, 1981.

	SESCORX2		MAINEARN		EDUYEARS	
CLASS	MEAN	STD	MEAN	STD	MEAN	STD
1	93.11	4.70	4224.24	5230.73	15.50	2.74
2	88.64	8.76	5720.98	8375.45	12.50	4.32
3	79.81	1.90	2398.24	2105.38	11.07	3.55
4	77.78	5.84	1835.14	940.64	13.03	2.11
5	57.01	10.90	1656.98	1869.45	10.30	3.63
6	48.89	22.05	1730.71	803.39	8.31	3.71
7	47.85	10.96	1536.21	799.75	8.79	3.56
8	36.47	22.11	1610.74	1126.38	7.81	4.26
9	26.09	10.62	1165.73	635.89	7.91	3.64
10	17.52	7.67	1342.29	1393.98	5.93	4.68

NOTE : Computed with a 20% Sample of the 1981 Hong Kong Census Data.

The observed frequencies of the 10 x 10 mobility table are presented in Table 4.3.3.. The data are then tested against the Perfect Mobility Model. The results of the log-linear analysis are shown in Table 4.3.4. and 4.3.5.. As expected, the overall "goodness-of-fit" of the model is far from acceptable (cf. Table 4.3.5.). The main reason for running the Perfect Mobility Model is to look into the distribution of the residuals of the model and to detect the phenomenon of immobility or class inheritance. In comparison with the distribution of adjusted residuals of the 14-category schema, the residuals of the 10-category schema (cf. Table 4.3.5.) demonstrate a much clearer and more homogeneous picture of class inheritance.

Table 4.3.3. Observed Frequencies of Father's Class Position by Son's or Daughter's Class Position (10-Category) in Hong Kong, 1981.

FATHER' CLASS POSITION	SON'S OR DAUGHTER'S CLASS POSITION										
	1	2	3	4	5	6	7	8	9	10	TOTAL
1	60	12	7	102	20	8	54	27	43	1	334
2	138	63	74	417	123	35	164	102	166	17	1299
3	52	11	45	233	33	26	123	65	94	3	685
4	100	25	33	438	47	30	135	64	114	4	990
5	48	7	16	231	88	26	174	60	153	5	808
6	118	26	48	578	129	215	677	197	598	25	2611
7	142	23	65	644	105	141	1211	280	855	22	3488
8	197	31	72	739	177	200	989	532	892	23	3852
9	135	13	65	585	103	155	693	216	954	15	2934
10	96	28	40	340	123	167	572	204	564	222	2356
TOTAL	1086	239	465	4307	948	1003	4792	1747	4433	337	19357

TABLE 4.3.4. Expected Frequencies under Perfect Mobility Model from Father's Class Position to Son's or Daughter's Class Position (10-Category) in Hong Kong, 1981.

FATHER'S CLASS POSITION	SON'S OR DAUGHTER'S CLASS POSITION									
	1	2	3	4	5	6	7	8	9	10
1	18.74	4.12	8.02	74.32	16.36	17.31	82.68	30.14	76.49	5.81
2	72.88	16.04	31.20	289.03	63.62	67.31	321.58	117.24	297.49	22.62
3	38.43	8.46	16.46	152.41	33.55	35.49	169.58	61.82	156.87	11.93
4	55.54	12.22	23.78	220.28	48.48	51.30	245.08	89.35	226.72	17.24
5	45.33	9.98	19.41	179.78	39.57	41.87	200.03	72.92	185.04	14.07
6	146.49	32.24	62.72	580.96	127.87	135.29	646.38	235.65	597.95	45.46
7	195.69	43.07	83.79	776.09	170.82	180.73	863.49	314.80	798.80	60.73
8	216.11	47.56	92.53	857.08	188.65	199.59	953.60	347.65	882.16	67.06
9	164.61	36.23	70.48	652.83	143.69	152.03	726.34	264.80	671.92	51.08
10	132.18	29.09	56.60	524.22	115.38	122.08	583.25	212.63	539.55	41.02

TABLE 4.3.5. Adjusted Residuals under Perfect Mobility Model from Father's Class Position to Son's or Daughter's Class Position (10-Category) in Hong Kong, 1981.

FATHER'S CLASS POSITION	SON'S OR DAUGHTER'S CLASS POSITION									
	1	2	3	4	5	6	7	8	9	10
1	9.8967	3.9367	-.3689	3.6738	.9316	-2.3175	-3.6684	-.6056	-4.3992	-2.0319
2	8.1291	12.2162	8.0287	8.8382	7.9041	-4.1872	-10.4882	-1.5275	-8.9890	-1.2333
3	2.2939	.8956	7.2523	7.5373	-.0987	-1.6663	-4.1984	.4314	-5.8210	-2.6548
4	6.3033	3.7750	1.9642	17.0791	-.2245	-3.1350	-8.3220	-2.8864	-8.7527	-3.3018
5	.4167	-.9686	-.8004	4.4254	8.0644	-2.5726	-2.1673	-1.6208	-2.7405	-2.4914
6	-2.6046	-1.1885	-2.0231	-.1496	.1099	7.5664	1.4929	-2.8378	.0024	-3.2909
7	-4.3630	-3.3981	-2.2948	-5.9390	-5.7037	-3.3523	15.0575	-2.2710	2.5013	-5.5369
8	-1.4951	-2.6998	-2.4143	-5.1111	-.9718	.0329	1.4767	11.5824	.4217	-6.0649
9	-2.5788	-4.2156	-.7175	-3.2684	-3.7791	.2688	-1.5482	-3.4133	13.4548	-5.5290
10	-3.4563	-.2169	-2.3828	-9.7366	.7758	4.4553	-.5730	-.6623	1.2789	30.4193

Goodness-of-Fit test statistics

Likelihood Ratio Chi Square = 2328.68158 DF = 81 P = 4E-32
Pearson Chi Square = 2893.91700 DF = 81 P = 4E-32

Index of dissimilarity = 0.115

(1) Table 4.3.5. shows that all ten adjusted residuals in the diagonals are positive in value and well exceed the value of two, which is the significant value for the 0.05 level (Norusis, 1985:330). They range from 7.2523 to 30.4193. Thus, the results confirm that there is immobility or class inheritance among these ten class categories.

(2) Nine out of ten of these diagonal residuals are of the highest value across the rows and columns in which they are located. As indicated in the previous section, this means that young men and women from each of these 9 class categories have the highest probability to "inflow" into their fathers' class positions and the least chance to "outflow" into other destinations. In short, they indicate a definite immobility and class inheritance in these 9 class categories.

(3) The distribution of the residuals also indicates that the phenomenon of class inheritance is much more likely to happen at the two extremes of the social hierarchy. At the lower extreme, the residuals of Classes 7 through 10 are all positive in value and larger than 10. At the top of the hierarchy, the residuals of Classes 1 and 2 are equal to 9.896 and 12.2162 respectively. Hence, these six residuals are among the seven highest values across the entire table.

(4) A clear line of social cleavage between manual and non-manual labourers also begins to emerge from the data. If we take Classes 1 though 5 as non-manual labourers and Classes 6 through 10 as manual labourers, we can then crosscut Table 4.3.5. into four subtables, as shown in Table 4.3.6.. Two prominent features emerge. First, in the upper right table, all the residuals

except one are negative in value. Of these 24 values, 19 of them are greater than 2, while the only positive value in this sub-table is as small as 0.4314. In other words, youths of non-manual origins are less likely to "outflow" into manual destinations. Second, in the lower left table, 23 out of 25 of the residuals are negative in value. 17 out of these 23 values are greater than 2, while the two positive values are also insignificant, which means that youths of manual origins have fewer chances to "outflow" into non-manual destinations. In conclusion, there prevail two definite social closures between which mobility is rare and difficult.

(5) So far, we have revealed only that inter-class mobility between manual and non-manual occupations is atypical. Yet we have not been able to verify the other side of the story, namely that intra-class "mobility is easy and typical" (Weber, 1978:302). In the upper left sub-table of Table 4.3.6., only one fifth of the residuals are negative in value and all of them are less than one. These data suggest that intra-class mobility within the non-manual division is easy and typical. However, within the manual division, the situation is less conclusive. In the lower right sub-table, we can still find one-third (8 out of 25) of the residuals that have significantly large negative values.

The phenomenon of class inheritance which emerges from the distribution of the adjusted residuals can further be verified using the quasi-perfect mobility model. The expected frequencies and goodness-of-fit statistics of the model are presented in Table 4.3.7.. The likelihood ratio chi square equals 890.52016 with 71 degrees of freedom so it suggest that the model still does not fit the data well. However, we can see that

TABLE 4.3.6. Adjusted Residuals under Perfect Mobility Model from Father's Class Position to Son's or Daughter's Class Position (10-Category) in Hong Kong, 1981.

FATHER'S CLASS POSITION	SON'S OR DAUGHTER'S CLASS POSITION									
	1	2	3	4	5	6	7	8	9	10
1	9.8967	3.9367	-.3689	3.6738	.9316	-2.3175	-3.6684	-.6056	-4.3992	-2.0319
2	8.1291	12.2162	8.0287	8.8382	7.9041	-4.1872	-10.4882	-1.5275	-8.9890	-1.2333
3	2.2939	.8956	7.2523	7.5373	-.0987	-1.6663	-4.1984	.4314	-5.8210	-2.6548
4	6.3033	3.7750	1.9642	17.0791	-.2245	-3.1350	-8.3220	-2.8864	-8.7527	-3.3018
5	.4167	-.9686	-.8004	4.4254	8.0644	-2.5726	-2.1673	-1.6208	-2.7405	-2.4914
6	-2.6046	-1.1885	-2.0231	-.1496	.1099	7.5664	1.4929	-2.8378	.0024	-3.2909
7	-4.3630	-3.3981	-2.2948	-5.9390	-5.7037	-3.3523	15.0575	-2.2710	2.5013	-5.5369
8	-1.4951	-2.6998	-2.4143	-5.1111	-.9718	.0329	1.4767	11.5824	.4217	-6.0649
9	-2.5788	-4.2156	-.7175	-3.2684	-3.7791	.2688	-1.5482	-3.4133	13.4548	-5.5290
10	-3.4563	-.2169	-2.3828	-9.7366	.7758	4.4553	-.5730	-.6623	1.2789	30.4193

by "blocking out" the diagonals of the 10 x 10 mobility table the likelihood ratio chi square has dropped substantially in comparison to the perfect mobility model results of both the 14 x 14 and 10 x 10 mobility table. Furthermore the index of dissimilarity of the model is 0.067, that is, it misplaces only 6.7% of the cases, while the baseline model misplaces 12%.

In conclusion, the 10 x 10 mobility table provides us with clearer and more definite evidence supporting the proposition that class inheritance does exist in the social structure of Hong Kong. However, it

still cannot provide us with a model which, on the whole, fits with the data. Therefore, we have to continue our search for a model which is congruent with the reality of Hong Kong society.

Table 4.3.7. Expected Frequencies Under Quasi-Perfect Mobility Model, from Father's Class Position to Son's or Daughter's Early Class Position (10-Category), in Hong Kong, 1981.

FATHER'S CLASS POSITION	SON'S OR DAUGHTER'S EARLY CLASS POSITION									
	1	2	3	4	5	6	7	8	9	10
1	60.00	3.14	7.23	66.81	14.89	15.25	71.62	25.37	67.53	2.17
2	74.13	63.00	31.00	286.59	63.86	65.39	307.20	108.84	289.66	9.31
3	38.94	7.07	45.00	150.53	33.54	34.35	161.36	57.17	152.15	4.89
4	42.50	7.72	17.77	438.00	36.61	37.49	176.11	62.40	166.06	5.34
5	45.02	8.18	18.83	174.04	88.00	39.71	186.56	66.10	175.91	5.65
6	150.01	27.24	62.73	579.92	129.23	215.00	621.63	220.25	586.14	18.84
7	179.14	32.53	74.91	692.55	154.33	158.03	1211.00	263.03	699.98	22.50
8	215.77	39.19	90.23	834.18	185.89	190.35	894.17	532.00	843.13	27.10
9	152.93	27.77	63.95	591.22	131.75	134.91	633.73	224.54	954.00	19.21
10	127.56	23.17	53.34	493.15	109.89	112.53	528.62	187.30	498.44	222.00

Goodness-of-Fit test statistics

Likelihood Ratio Chi Square = 890.52016 DF = 71 P = 4E-32
Pearson Chi Square = 955.78178 DF = 71 P = 4E-32

Index of dissimilarity = .067

4. 5 x 5 MOBILITY TABLE ANALYSES

The analyses in the previous section has revealed that a definite line of social cleavage between manual and non-manual labourers is running through the social structure of Hong Kong. Therefore, in this section, we are going to further our analysis by grouping the class categories according to manual and non-manual division (cf. Goldthorpe, 1980:40-43; Halsey, 1980:17-19; Hope, 1972). We will collapse the 10-category class schema into 5 categories. The 5-category class schema is presented in Table 4.4.1..

Based on this 5-category class schema, a 5 x 5 mobility table is constructed. The observed frequencies of the table are presented in Table 4.4.2.. The data are then tested against the Perfect Mobility Model. The results of the analysis are shown in Table 4.4.3. and 4.4.4.. As pointed out before, the overall "goodness-of-fit" statistics are not the point of interest in running the Perfect Mobility Model because it has been verified in the previous sections that the ideal model of perfect mobility does not correspond with the reality of Hong Kong society. Therefore, our primary interest is to look into the distributions of the adjusted residuals of the model and to verify the phenomenon of class inheritance.

In Table 4.4.4., we can see that the residuals of the diagonals are all positive and significantly large values. In fact, these five values take up 81% of the positive value in the entire table. Thus, it suggests that class inheritance definitely prevails among these five class categories. Furthermore, we can also detect two other significantly large and positive values, which lie in $Cell_{1\ 2}$ and $Cell_{2\ 1}$ of Table 4.4.4.. These values indicate that there are relatively greater opportunities for inter-class mobility between professional and managerial classes and

Table 4.4.1. *Comparison among the 14-Category, 10-Category, and 5-Category Class Schemata.*

14-Category Class Schema	10-Category Class Schema	5-Category Class Schema
1 Professional, Technical & related workers — Employers	1 Professional, Technical & related workers	1 Professionals, Administrator, & Managers
2 Professional, Technical & related workers — except Employers		
3 Administrative and Managerial workers — Employers	2 Administrative and Managerial workers	
4 Administrative and Managerial workers — except Employers		
5 Supervisors and Foremen	3 Supervisors and Foremen	2 Routine Non-manual Labourers
6 Clerical and related workers	4 Clerical and related workers	
7 Sales workers --- except Hawkers	5 Sales workers --- except Hawkers	
8 Operative workers	6 Operative workers	3. Skilled Manual Labourers
9 Technicians and Craftsmen	7 Technicians and Craftsmen	
10 Service workers --- except Domestic Helpers	8 Service workers --- except Domestic Helpers	4. Semi-Skilled Manual Labourers
11 Manufacturing Laborers	9 Manufacturing Laborers	
12 Sales workers --- Hawkers	10 Unskilled Manual Labourers	5. Unskilled Manual Labourers
13 Agricultural workers and Fisherfolk		
14 Service workers --- Domestic Helpers		

Table 4.4.2. : *Observed Frequencies of Father's Class Position by Son's or Daughter's Early Class Position (5-Category) in Hong Kong, 1981.*

FATHER'S CLASS POSITION	SON'S OR DAUGHTER'S EARLY CLASS POSITION					
	1	2	3	4	5	TOTAL
1	273	743	261	338	18	1633
2	243	1164	514	550	12	2483
3	309	1569	2244	1930	47	6099
4	376	1741	2037	2594	38	6786
5	124	503	739	768	222	2356
TOTAL	1325	5720	5795	6180	337	19357

Table 4.4.3. : *Expected Frequencies under Perfect Mobility Model from Father's Class Position to Son's or Daughter's Early Class Position (5-Category) in Hong Kong, 1981.*

FATHER'S CLASS POSITION	SON'S OR DAUGHTER'S EARLY CLASS POSITION				
	1	2	3	4	5
1	111.78	482.55	488.88	521.36	28.43
2	169.96	733.73	743.35	792.73	43.23
3	417.48	1802.26	1825.89	1947.19	106.18
4	464.51	2005.27	2031.56	2166.53	118.14
5	161.27	696.20	705.33	752.19	41.02

Table 4.4.4.: *Adjusted Residuals under Perfect Mobility Model from Father's Class Position to Son's or Daughter's Early Class Position (5-Category) in Hong Kong, 1981.*

FATHER'S CLASS POSITION	SON'S OR DAUGHTER'S EARLY CLASS POSITION				
	1	2	3	4	5
1	16.5110	14.7620	-12.8677	-10.1714	-2.0623
2	6.2169	20.2696	-10.7638	-11.1915	-5.1320
3	-6.6468	-7.9098	14.1252	-.5706	-7.0010
4	-5.2797	-8.7246	.1790	13.8124	-9.2301
5	-3.2446	-9.3085	1.6163	.7457	30.4193

Goodness-of-Fit test statistics

Likelihood Ratio Chi Square = 1787.84081 DF = 16 P = .000
Pearson Chi Square = 2239.38185 DF = 16 P = .000

Index of Dissimilarity = 0.104

routine non-manual workers, that is, Categories 1 and 2. Therefore, if we collapse Categories 1 and 2 together, we will then have four diagonals which take up 98% of the positive values in the entire table. On the other hand, among the off-diagonal residuals, most of them (16 out of 19) are significantly large negative values, while the remaining three positive values are insignificant. What we have is a particular pattern of distributions of residuals with most of the positive values clustering along the diagonals, with the off-diagonal cells being preoccupied with negative residuals. This indicates that within the four clusters in the diagonals, class inheritance is typical and intra-cluster mobility is

easy, while the chances to "outflow" from or "inflow" into these clusters are most unlikely. In other words, inter-cluster mobility is rare and difficult. In light of the Weberian conception of social class, which defined social class as closure within which social mobility is easy and typical, we may conclude that these data suggest that in the social structure of Hong Kong there prevail four social classes, within which mobility chances are specifically differentiated.

We can further our validation of the thesis of social classes in Hong Kong by testing the data against a *revised quasi-perfect mobility model.* That is, in the model we are not only "blocking out" the diagonals but also $Cell_{1\ 2}$ and $Cell_{2\ 1}$ in the 5 x 5 table. The results of the analysis are presented in Table 4.4.5.. The likelihood ratio chi square of the model is 37.5061 with 9 degrees of freedom, while the 95% percentile of the chi square distribution with 9 degree of freedom is 16.919. Thus the 5 x 5 revised quasi-perfect mobility model still does not match with the data. However, in comparison with the baseline model (i.e. the 14-category perfect mobility model), the present model is by all means a substantial improvement. For examples, it accounts for only 1.34% of the variance and only misplaces 1% of the cases.

What confront us are two sets of analysis results. On one hand, the "goodness-of-fit" statistics suggest that we are not able to substantiate the revised quasi-perfect mobility model. On the other hand, the distribution of the adjusted residuals of the perfect mobility model confirms that four social closures of mobility opportunities exist in Hong Kong society. In my opinion, what is at issue here is a difference between two orientations in mobility study. For instance, a study may set out to find the general pattern of social mobility prevailing in a society. If

Table 4.4.5. : *Expected Frequencies under Revised Quasi-Perfect Mobility Model from Father's Class Position to Son's or Daughter's Early Class Position (5-Category) in Hong Kong, 1981*

FATHER'S CLASS POSITION	SON'S OR DAUGHTER'S EARLY CLASS POSITION				
	1	2	3	4	5
1	273.00	743.00	292.77	317.04	7.19
2	243.00	1164.00	510.57	552.89	12.55
3	322.21	1518.65	2244.00	1969.45	44.69
4	364.64	1718.61	2058.18	2594.00	50.57
5	122.15	575.73	689.48	746.63	222.00

Goodness-of-Fit test statistics

Likelihood Ratio Chi Square = 37.50761 DF = 9 P = .000
Pearson Chi Square = 41.62156 DF = 9 P = .000

Index of Dissimilarity = .01004

that is the case, the objective of the study will then be to look for a model which can account for most of the movement in a mobility table and remove most of the residuals (both positive and negative values). The "goodness-of-fit" statistics in the log-linear model are specifically catered for this objective. However, if a study intends to reveal the phenomenon of immobility or class inheritance implanted in a social structure, its main concern will then be the patterns of distributions between the positive and negative residuals in the log-linear model. In other words, the orientation of the study will be to find out the relative chances of mobility within and across the cells or clusters in a mobility table. For this orientation, the overall "goodness-of-fit" of the model is not its primary concern, because a model may have a significantly large

chi square (i.e. a significantly large amount of value of its residuals remain unaccounted for) but at the same time be able to present a clear and theoretically meaningful pattern of distributions between the positive and negative residuals. In other words, most of residuals, which remain unaccounted for by the model, are negative in value and lie in the off-diagonal cells, just as in the case of the present study. In fact, the present study undoubtedly belongs to the second orientation, because we are in search of social classes and closures of mobility opportunities that prevail in the social structure of Hong Kong. Therefore, with reference to the distributions of the adjusted residuals in the perfect mobility model, we accept the proposition that there are four social classes which exist in the social structure of Hong Kong though the overall "goodness-of-fit' statistics fail to lend their definite support.

5. ANALYSES OF MOBILITY TABLE OF FATHER AND SON

It is a common practice in mobility table analysis to construct and analyze tables containing only data of fathers' and sons' class positions and exclude daughters' data from the analysis (Duncan, 1967; Featherman & Hauser, 1978; Hope, 1972; and Goldthorpe, 1980). However, in the foregone analysis, we have incorporated both sons' and daughters' data into the destination dimension of the mobility table. The reasons for incorporating daughters' data into the study are quite obvious. The primary reason is that it is a prominent characteristic in the labour market of Hong Kong that female participants have constituted a significant share of the labour force (cf. Table 3.1.2.). This phenomenon

is especially true among young women. For example, in 1981 the female labour force participation rates for the age cohort 15-19, 20-24 and 25-34 were 42.6%, 79.7% and 56.8% respectively (Census & Statistics Dept., 1981:31). Therefore, in our mobility table which contains offspring aged 15 to 27, one cannot argue for the exclusion of daughters from the analysis. Furthermore, it is a well-recorded fact in mobility analysis that there is class inheritance between fathers and sons. If we are able to prove the existence of class inheritance with data containing both sons and daughters, as the present study has done, we will have much greater confidence in asserting the proposition that immobility or class inheritance prevails in Hong Kong society.

However, for the sake of comparing studies in other societies as well as results of the foregone analyses, we will construct and analyze mobility tables which contain data of fathers and sons in this section. We begin with the 10 x 10 table (cf. Table 4.5.1.) and then proceed to the 5 x 5 table (cf. Table 4.5.5.). For each table, both perfect-mobility and quasi-perfect mobility models are tested. The results of these analyses are presented in Table 4.5.2. to 4.5.4. and Table 4.5.6. to 4.5.8..

TABLE 4.5.1. : Observed Frequencies of Father's Class Position by Son's Early Class Position (10-Category) in Hong Kong, 1981.

FATHER'S CLASS POSITION	SON'S EARLY CLASS POSITION										
	1	2	3	4	5	6	7	8	9	10	TOTAL
1	31	6	6	29	10	7	37	21	13	0	160
2	73	44	57	127	71	31	117	82	80	14	696
3	32	7	30	77	20	18	75	51	33	2	345
4	61	14	26	190	23	26	106	48	36	3	533
5	22	3	12	84	56	25	140	49	50	4	445
6	71	19	35	214	58	178	477	159	186	16	1413
7	83	19	40	197	44	108	913	218	244	12	1878
8	105	19	47	256	94	163	681	419	259	14	2057
9	73	11	39	239	62	122	494	159	393	10	1602
10	53	19	28	111	69	139	412	155	177	148	1311
TOTAL	604	161	320	1524	507	817	3452	1361	1471	223	10440

TABLE 4.5.2. : Expected Frequencies under Perfect Mobility Model from Father's Class Position to Son's Early Class Position (10-Category) in Hong Kong, 1981.

FATHER'S CLASS POSITION	SON'S EARLY CLASS POSITION									
	1	2	3	4	5	6	7	8	9	10
1	9.26	2.47	4.90	23.36	7.77	12.52	52.90	20.86	22.54	3.42
2	40.27	10.73	21.33	101.60	33.80	54.47	230.13	90.73	98.07	14.87
3	19.96	5.32	10.57	50.36	16.75	27.00	114.07	44.98	48.61	7.37
4	30.84	8.22	16.34	77.81	25.88	41.71	176.24	69.48	75.10	11.38
5	25.75	6.86	13.64	64.96	21.61	34.82	147.14	58.01	62.70	9.51
6	81.75	21.79	43.31	206.27	68.62	110.58	467.21	184.20	199.09	30.18
7	108.65	28.96	57.56	274.14	91.20	146.97	620.96	244.82	264.61	40.11
8	119.01	31.72	63.05	300.27	99.89	160.97	680.15	268.16	289.83	43.94
9	92.68	24.71	49.10	233.86	77.80	125.37	529.70	208.84	225.72	34.22
10	75.85	20.22	40.18	191.38	63.67	102.59	433.48	170.91	184.72	28.00

TABLE 4.5.3.: Adjusted Residuals under Perfect Mobility Model from Father's Class Position to Son's Early Class Position (10-Category) in Hong Kong, 1981.

FATHER'S CLASS POSITION	SON'S EARLY CLASS POSITION									
	1	2	3	4	5	6	7	8	9	10
1	7.4198	2.2840	.5065	1.2734	.8265	-1.6378	-2.6934	.0335	-2.1855	-1.8832
2	5.5010	10.5925	8.1185	2.8225	6.7901	-3.4282	-9.4353	-1.0177	-2.0374	-.2352
3	2.8235	.7463	6.1701	4.1306	.8267	-1.8344	-4.5475	.9796	-2.4566	-2.0332
4	5.7448	2.0858	2.4926	14.1289	-.5966	-2.6011	-6.6385	-2.8372	-4.9970	-2.5787
5	-.7772	-1.5187	-.4609	2.6126	7.7510	-1.7722	-.7353	-1.2967	-1.7686	-1.8448
6	-1.3171	-.6479	-1.3793	.6267	-1.4135	7.1821	.5953	-2.1416	-1.0766	-2.8063
7	-2.7995	-2.0599	-2.5963	-5.5673	-5.5954	-3.6969	15.8176	-2.0299	-1.5095	-4.9548
8	-1.4762	-2.5404	-2.2911	-3.0854	-.6747	.1856	.0445	11.0232	-2.1805	-5.0950
9	-2.2893	-3.0202	-1.5916	.3957	-1.9958	-.3404	-2.0608	-4.0198	13.0558	-4.5487
10	-2.8903	-.2918	-2.0877	-6.7234	.7329	4.0035	-1.3488	-1.3953	-.6554	24.5128

Goodness-of-Fit test statistics

Likelihood Ratio Chi Square = 1547.29878 DF = 81 P = 4E-32
Pearson Chi Square = 1970.20290 DF = 81 P = 4E-32

Index of Dissimilarity = 0.129

TABLE 4.5.4. : Expected Frequencies under Quasi-Perfect Mobility Model from Father's Class Position to Son's Early Class Position (10-Category) in Hong Kong, 1981.

FATHER'S CLASS POSITION	SON'S EARLY CLASS POSITION									
	1	2	3	4	5	6	7	8	9	10
1	31.00	1.89	4.51	20.94	7.08	11.24	45.17	17.78	19.10	1.29
2	41.90	44.00	21.66	100.52	34.00	53.93	216.80	85.34	91.67	6.19
3	20.64	4.47	30.00	49.52	16.75	26.57	106.80	42.04	45.16	3.05
4	25.64	5.56	13.25	190.00	20.81	33.00	132.65	52.22	56.09	3.79
5	25.99	5.63	13.43	62.35	56.00	33.45	134.49	52.94	56.86	3.84
6	85.23	18.47	44.05	204.46	69.17	178.00	440.98	173.59	186.45	12.60
7	91.01	19.73	47.04	218.32	73.86	117.13	913.00	185.36	199.10	13.45
8	119.21	25.84	61.61	285.97	96.74	153.42	616.79	419.00	260.79	17.62
9	88.97	19.28	45.98	213.42	72.20	114.50	460.31	181.19	393.00	13.15
10	74.41	16.13	38.46	178.50	60.39	95.77	385.01	151.55	162.79	148.00

Goodness-of-Fit test statistics

Likelihood Ratio Chi Square = 457.58759 DF = 71 P = 4E-32
Pearson Chi Square = 498.62184 DF = 71 P = 4E-32

Index of Dissimilarity = 0.064

Table 4.5.5. *Observed Frequencies of Father's Class Position by Son's Early Class Position (5-Category) in Hong Kong, 1981.*

FATHER'S CLASS POSITION	SON'S CLASS POSITION 1	2	3	4	5	TOTAL
1	154	300	192	196	14	856
2	139	518	390	267	9	1323
3	192	588	1676	807	28	3291
4	208	737	1460	1230	24	3659
5	72	208	551	332	148	1311
TOTAL	765	2351	4269	2832	223	10440

Table 4.5.6. : *Expected Frequencies under Perfect Mobility Model from Father's Class Position to Son's Early Class Position (5-Category) in Hong Kong, 1981.*

FATHER'S CLASS POSITION	SON'S CLASS POSITION 1	2	3	4	5
1	62.72	192.76	350.03	232.20	18.28
2	96.94	297.93	540.99	358.88	28.26
3	241.15	741.11	1345.72	892.73	70.30
4	268.12	823.98	1496.19	992.56	78.16
5	96.06	295.23	536.08	355.63	28.00

Table 4.5.7. : *Adjusted Residuals under Perfect Mobility Model from Father's Class Position to Son's Early Class Position (5-Category) in Hong Kong, 1981.*

FATHER'S CLASS POSITION	SON'S CLASS POSITION 1	2	3	4	5
1	12.4951	9.1581	-11.4664	-2.9047	-1.0571
2	4.7481	15.5001	-9.0352	-6.0799	-3.9190
3	-3.9732	-7.7211	14.1518	-4.0618	-6.1624
4	-4.7322	-4.2712	-1.5102	10.9547	-7.6835
5	-2.7275	-6.1675	.8964	-1.5696	24.5128

Goodness-of-Fit test statistics

Likelihood Ratio Chi Square = 1058.11300 DF = 16 P = .000
Pearson Chi Square = 1352.30890 DF = 16 P = .000

Index of Dissimilarity = 0.1114

Table 4.5.8. : *Expected Frequencies under Revised Quasi-Perfect Mobility Model from Father's Class Position to Son's Early Class Position (5-Category) in Hong Kong, 1981.*

FATHER'S CLASS POSITION	SON'S CLASS POSITION 1	2	3	4	5
1	154.00	300.00	234.95	161.70	5.35
2	139.00	518.00	389.24	267.90	8.86
3	178.95	581.21	1676.00	827.46	27.37
4	218.45	709.50	1467.63	1230.00	33.42
5	74.60	242.29	501.18	344.94	148.00

Goodness-of-Fit test statistics

Likelihood Ratio Chi Square = 41.38510 DF = 9 P = .000
Pearson Chi Square = 45.31061 DF = 9 P = .000

Index of Dissimilarity = 0.014

In summary, a comparison of the "goodness-of-fit" statistics of the various models are presented in Table 4.5.9.. First of all, the likelihood ratio chi squares of models 7 and 9 (i.e. the perfect-mobility models of 10x10 and 5x5 tables containing sons only) indicate that the two respective models of perfect mobility do not fit with the data. Furthermore, though models 8 and 10 show substantial improvements in the "goodness-of-fit" when compared with models 7 and 9, they are still far from significant. Thus, both sets of models I and II suggest a similar conclusion, that is, the ideal model of perfect mobility does not exist in both sets of data. However, the revised quasi-perfect mobility models (i.e. models 6 and 10) seem by far the most satisfactory.

As explicated before, the performance of models 6 and 10 can and should be evaluated in light of the distribution of the adjusted residuals of the two models. By comparing Table 4.4.4. with 4.5.7., we notice that the patterns of distributions of residuals are almost identical. That is, the four diagonals have taken up almost all the positive values in the table, while the off-diagonal cells are crowded with residuals of negative value. The two models indicate that four definite closures of mobility opportunities prevail, showing that four social classes exist in the social structure of Hong Kong.

Finally, we may want to know whether immobility or class inheritance is more likely to happen between father and son than between father and both son and daughter. The index of dissimilarity of the various models, shown in Table 4.5.9., may provide the answer. By comparing the index of models 3 and 7, we can see that model 7 has 1.4% more misplaced cases than model 3, which shows that the mobility table containing only data of father and son deviates farther from the ideal model of perfect mobility. Furthermore, by comparing the indices of

Table 4.5.9. *Comparison of Goodness-of-Fit Statistics among the Various Mobility Models*

MODELS	NO. OF CASES	LIKELIHOOD RATIO X^2	DEGREE OF FREEDOM	X^2_R/X^2_1	X^2_R/X^2_7	INDEX OF DISSIMILARITY
I. Mobility Table containing both Sons and Daughters						
A. 14 x 14 Table						
1. Perfect Mobility Model	19357	2790.97795	169	100.00 %		0.120
2. Quasi-Perfect Mobility Model	19357	1164.36860	157	41.72 %		0.072
b. 10 x 10 Table						
3. Perfect Mobility Model	19357	2328.68158	81	83.44 %		0.115
4. Quasi-Perfect Mobility Model	19357	890.52016	71	31.91 %		0.067
c. 5 x 5 Table						
5. Perfect Mobility Model	19357	1787.84081	16	64.06 %		0.104
6. Revised Quasi-Perfect Mobility Model	19357	37.50761	9	1.34 %		0.010
II. Mobility Table containing Sons only						
A. 10 x 10 Table						
7. Perfect Mobility Model	10440	1547.29878	81		100.00 %	0.129
8. Quasi-Perfect Mobility Model	10440	457.58759	71		29.57 %	0.064
B. 5 x 5 Table						
9. Perfect Mobility Table	10440	1058.11300	16		68.39 %	0.111
10. Revised Quasi-Perfect Mobility Model	10440	41.38510	9		2.68 %	0.014

X^2_R = the likelihood ratio chi square of the respective model

X^2_1 = the likelihood ratio chi square of model 1

X^2_7 = the likelihood ratio chi square of model 7

models 4 and 8, we can see that the index of model 8 is slightly smaller than that of model 4. This means that by "blocking out" the diagonals, where immobility lies, model 8 has misplaced less cases (0.3%) than model 4. Hence, immobility is more likely to happen between father and son. However, it must be underlined that the difference between the two sets of models, I and II, is quite small.

In conclusion, from the analyses of the various mobility tables, two prominent features emerge. First, social mobility is by no means perfect in the social structure of Hong Kong. In other words, one's initial destination, that is one's early class position, is not independent of his origin. Second, mobility opportunities in Hong Kong society are differentiated in a way that they constitute four social closures within which mobility is typical and easy and across which mobility is rare and difficult. In light of Weber's definition of social class, we may conclude that the class structure of Hong Kong is broadly structured into four social classes, namely non-manual, skilled manual, semi-skilled manual, and unskilled manual labourers (cf. Table 4.4.1. for detailed classifications). Thus, it confirms Hypothesis 2 of the study which states that the economic classes in Hong Kong cluster together to from a limited number of social classes.

6. EMERGENCE OF A CLASS STRUCTURE: A SUMMARY OF THE ANALYSIS

In this chapter and the last, we have tried to construct the occupational hierarchy and the class structure of Hong Kong society. We began the excursion, first, with the 153 occupational groupings generated from the occupational classification found in the Hong Kong census data. Using the means of income and educational levels of each occupational grouping, we have constructed a socioeconomic status index for all these occupations, which ranges, by definition, from 0 to 100. Arraying these 153 occupational groupings by their socioeconomic status scores, we obtained an occupational hierarchy of Hong Kong society. In light of the Weberian conception of economic class, we suggested that the index reflects the market situations of the economic class in Hong Kong. Based on the distribution of the socioeconomic status scores, we confirmed the hypothesis that market situations of economic classes in Hong Kong vary greatly. Second, with reference to both the Market- and Production-relational perspectives in class definition, we grouped the 153 occupational groupings into 14 class categories with which a 14 x 14 mobility table was constructed. Based upon the table, new mobility tables were generated and various mobility models were tested. Subsequently, we came up with a 5-category class schema with which four closures of mobility opportunities were identified. According to Weber's definition of social class, we suggested that the class structure of Hong Kong is structured into four social classes, namely non-manual, skilled manual, semi-skilled manual, and unskilled manual labourers.

In summary, in Chapters Three and Four, we have tried to reveal the process of class structuration of Hong Kong society, that is "the

process whereby economic classes become social classes" (Giddens, 1980:105). In other words, we have traced the way through which the variations in market situations constitute closures of mobility opportunities within the social structure of Hong Kong.

CHAPTER 5

CONSTRUCTING THE LADDER OF SUCCESS

In Chapters Three and Four, we have investigated the nature of the occupational hierarchy and class structure in Hong Kong. We have been able to establish that there is a wide range of variation in market capacities among occupational groupings in Hong Kong. We have also located four social classes, among which opportunities for social mobility are specifically differentiated. Based on these findings, we can now investigate how these differentiated market situations and class positions are allocated among young men and women in Hong Kong. In other words, what are the criteria and mechanisms that govern the attainment opportunity of these young men and women as they move along the ladder of success in Hong Kong society?

From the discussion in Chapters One and Two, we know that the debate between the socialization and structural models within the status attainment study is mainly centered around the validity of the functionalist conception of stratification. On one hand, the socialization model based on the functionalist conception of stratification (Parsons, 1940; Davis and Moore, 1945; and Bell, 1973) assumes that status attainment process operates within an universalistic, achievement-oriented and meritocractic social structure. The model "tends

to view the individual as relatively free to move within the social system, his attainment being determined by what he chooses to do and how well he does it" (Kerckhoff, 1976:369; see also Crowder, 1974; Horan, 1978; & Stolzenberg, 1975). The studies of the socialization approach, therefore, concentrate its analyses on explaining the differentials in status attainment by socialization outcomes and individual efforts. On the other hand, the structural model criticizes the socialization model as well as functionalism of ignoring the ascribed and structural constraints borne upon the attainment process. Thus, to the structuralists, the social structure is depicted not as an open and achievement-oriented system but rather a deterministic and ascription-oriented context. Accordingly, the studies of the structural approach emphasize on explaining the differentials in status attainment by ascribed constraints generated from the social structure. In this chapter, we will address to this theoretical debate within the social context of Hong Kong by investigating whether individual achievement is really more essential than ascription in determining one's opportunity for status attainment as functionalist proclaims.

Apart from the aforementioned theoretical concern, this chapter also aims to address an empirical problem which I have explicated in the Prologue. It has been confirmed by a stream of empirical studies conducted in Hong Kong in the last two decades that the Hong Kong Chinese strongly believe that Hong Kong is a land of abundant opportunities and these opportunities are allocated among them according to individual achievement and effort rather than ascription (Chaney,1973; Johnson, 1971; Lau & Ho, 1982; and Lau & Kuan, 1988). Thus, in this chapter we are to investigate whether such a subjective perception is in congruence with the objective reality in the Hong Kong society.

In shot, what we set out to explore in this chapter is to verify Hypothesis 3 of this study which states

Hypothesis3 *In Hong Kong, an individual's attainment of class situations depends on individual achievement rather than ascription.*

Hence, in this chapter, we will construct and test a number of status attainment models with Hong Kong data. The first model to be tested is Blau and Duncan's basic attainment model, which simply consists of variables representing the socioeconomic statuses of fathers and their sons or daughters. Then the basic model is extended and tested by including other family-background variables, namely mother's educational attainment and number of siblings. Finally, we will test a structuralist model, which is an attainment model that takes into account one of the structural constraints, namely, sex difference which burdens individuals in their attainment process. The data set to be used in these verifications is *the family data set*, a part of which has been used in the mobility table analysis in Chapter Four.

1. SOCIAL BACKGROUND AND STATUS ATTAINMENT ---- A TEST OF BLAU AND DUNCAN'S BASIC MODEL

Blau and Duncan's status attainment model is built upon a conceptual scheme which defines "the individual's life cycle as sequence in time that can be described, however partially and crudely, by a set of classificatory or quantitative measurements taken at successive stages." The model is, then, constructed by following individuals as they pass through these successive stages in life. Through this we can determine "how and to what degree do the circumstances of births condition subsequent status? and, how does status attained (whether by ascription or

achievement) at one stage of the life cycle affect the prospects for a subsequent stage?" (Blau and Duncan, 1967:164) Given this conceptual scheme, Blau and Duncan construct their basic model with five variables, which measure successive stages in life. They are (1) father's educational attainment, (2) father's occupational status, (3) respondent's educational attainment, (4) status of respondent's first job, and (5) status of respondent's occupation in 1962 (Blau and Duncan, 1967:165).

Based upon Blau and Duncan's basic model, we will begin our analysis with a four-variable model. The data set under study does not allow us to trace the attainment path of sons and daughters beyond their early career, thus we could only have one variable measuring their early status attainment. Hence, the model, which is to be analyzed, consists of:

(1) FEDYRS (x_1) : Father's years of education,

(2) FSES (x_2) : Father's socioeconomic status,

(3) EDYRS (y_1) : Son's and daughter's years of education, and

(4) SES (y_2) : Son's and daughter's socioeconomic status.

Apart from identifying the variables in the model, we also have to determine the causal or temporal ordering of these variables. Based upon the temporal order worked out by Blau and Duncan (1967:166-168), we postulate that the causal order of the variables in our model is : (FEDYRS, FSES) -- (EDYRS) -- (SES)

This causal or temporal order implies, first of all, that we make no assumption about the temporal ordering between FEDYRS and FSES, since the father's career is not the main concern of the study and furthermore they can be discerned as "contemporaneous from the son's (and daughter's) viewpoint" (Blau and Duncan, 1967:166). In other words, we would simply take fathers' status variables as "a configuration of background

circumstances or origin conditions for...sons (and daughters)" (Blau and Duncan, 1967:166).

Second, the causal order also implies the precedence of FEDYRS and FSES with respect to EDYRS and SES. However, it must be underlined that the data set used in this study contains only concurrent measures of educational levels and occupational statuses of fathers and their sons or daughters in 1981, thus it may seem to be incongruent with the assumption of temporal order. Yet I think the incongruence is not as problematic as it appears. First, we would contend that though the variables in question are concurrent measurement of 1981, this does not mean that we cannot determine the temporal order among them. This is especially true for the precedence of FEDYRS to EDYRS and SES, because it is quite a common occurrence that a father will have finished schooling well before his son or daughter leaves formal schooling for a full-time job. Second, as for the priority of FSES with respect to EDYRS and SES, we have to admit that this causal order is more problematic. As explicated in Chapter Two, in order to resolve, at least partially, this problem, we suggest that we should apply Duncan's origin-destination interpretation to the variables in question. That is, instead of thinking of father's occupational status as such, we can "think of it as describing the origin statuses of the sons (and daughters). Particularly if the data on father's occupation applies to a time point proximate to the opening of the son's (and daughter's) career, this origin status provides a natural baseline against which one can measure the son's subsequent occupational achievement" (Duncan, 1966:62-63; see also Blau and Duncan, 1967:166) . To further our compliance with Duncan's origin-destination interpretation, we have confined our analysis to a sample of sons and daughters who were age fifteen to twenty-seven in 1981, that is, at "a time point proximate to

the opening of their career". Thus, we assume that FEDYRS and FSES are origin variables which contribute to the subsequent achievement of the young men and women under study.

Finally, for the assumption of the precedence of EDYRS to SES, we have tailored our sample in a way that only young men and women who had left formal schooling for full-time occupations in 1981 would be included. Thus, any case which does not correspond with the causal order will be excluded from the study.

So far we have identified the constituent variables as well as their causal ordering for our status attainment model. Now we can proceed to the third step of our model-building process, that is to establish the pattern of associations among the variables. This can simply be accomplished by computing the simple correlation for the four variables in our model. The correlation matrix is presented in Table 5.1.1.

TABLE 5.1.1. *PEARSON CORRELATION COEFFICIENTS FOR THE FOUR CONSTITUENT VARIABLES IN THE BASIC MODEL OF STATUS ATTAINMENT* (N=19355)

	VARIABLES			
VARIABLES	EDYRS	SES	FEDYRS	FSES
EDYRS (y_1)	1.00000			
SES (y_2)	0.58165	1.00000		
FEDYRS (x_1)	0.29805	0.21049	1.00000	
FSES (x_2)	0.25500	0.22619	0.37051	1.00000

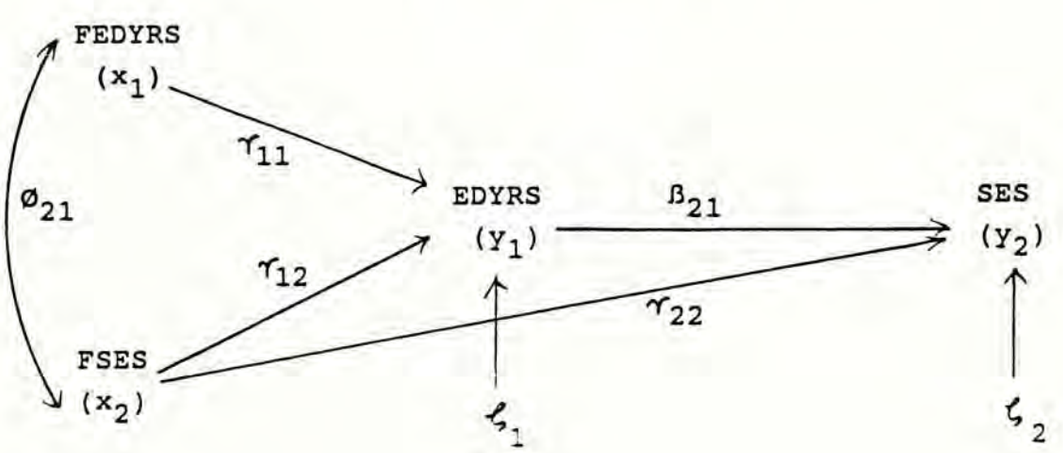
All coefficients are significant at 0.0001 level.

In view of the assumed causal ordering, these simple correlations can be viewed as reflecting the gross effects of the antecedent variables upon their respective consequent variables. But it must be underlined that

these correlations are in no way telling us the net effects or direct and indirect effects among these variables. However, there are still a number of observations worth highlighting. The first observation is that the magnitude of $r_{x_2\, x_1}$ (=.37051)is considerably smaller than that of $r_{y_2\, y_1}$ (=.58165). The difference can be interpreted as the gross effect of education on socioeconomic status has risen in Hong Kong over the years between the father's and son and daughter's generations. The second observation is that there is a clear order of influences on the son's or daughter's educational attainment. That is, $r_{y_1\, x_1} > r_{y_1\, x_2}$. In other words, the father's educational attainment has a greater effect on son's and daughter's educational attainment than father's socioeconomic status. Third, we can also see an order of influences on the son's and daughter's early socioeconomic status. That is, $r_{y_2\, y_1} > r_{y_2\, x_2} > r_{y_2\, x_1}$.

Based on the causal ordering and the simple correlations, we can now construct a causal model for the four variables. The graphic representation of the model is shown in Figure 5.1.1.

FIGURE 5.1.1. ***Basic Model of Status Attainment.***



To construct this causal model, the linear structural equation modeling method is used (Duncan, 1975; and Asher, 1983). More specifically, I use the computer program known as the LISREL model (Jöreskog and Sörbom, 1986) to estimate the parameters of the model presented in Figure 5.1.1.. In fact, I have already used the LISREL notation to indicate the parameters in Figure 5.1.1..

As shown in Figure 5.1.1., the causal model is a recursive model with exogenous variables x_1 and x_2 and endogenous variables y_1 and y_2. Thus, the structural equations are as follows.

$$y_1 = \gamma_{11}x_1 + \gamma_{12}x_2 + \zeta_1 \qquad (51.1)$$

$$y_2 = \beta_{21}y_1 + \gamma_{22}x_2 + \zeta_2 \qquad (51.2)$$

or in matrix form

$$\begin{bmatrix} y_1 \\ y_2 \end{bmatrix} = \begin{bmatrix} 0 & 0 \\ \beta_{21} & 0 \end{bmatrix} \begin{bmatrix} y_1 \\ y_2 \end{bmatrix} + \begin{bmatrix} \gamma_{11} & \gamma_{12} \\ 0 & \gamma_{22} \end{bmatrix} \begin{bmatrix} x_1 \\ x_2 \end{bmatrix} + \begin{bmatrix} \zeta_1 \\ \zeta_2 \end{bmatrix}$$

that is, $\underset{\sim}{y} = \underset{\sim}{B}\underset{\sim}{y} + \underset{\sim}{\Gamma}\underset{\sim}{x} + \underset{\sim}{\zeta}$

Accordingly, the model involves four parameter matrices, i.e. $\underset{\sim}{B}$(BETA), $\underset{\sim}{\Gamma}$(GAMMA), $\underset{\sim}{\Phi}$(PHI), and $\underset{\sim}{\Psi}$(PSI). These parameters can be estimated by means of the maximum likelihood method in the LISREL computer program. These LISREL estimates are recorded in Table 5.1.2.. Furthermore, the LISREL computer program also provides the T-values of these parameters which "can be used to test whether the true parameters are zero" (Jöreskog and Sörbom, 1986:III.12). These T-values are presented in Table 5.1.3..

Based upon these figures, we can now evaluate the performance of the basic model. Jöreskog and Sörbom suggest that model evaluation can be conducted in two different ways, one is to assess the explanatory power

of the model, while the other is to see how well the model fits to the data (Jöreskog and Sörbom, 1986:I.36-I.42).

TABLE 5.1.2. *LISREL ESTIMATES (MAXIMUM LIKELIHOOD) FOR THE BASIC MODEL OF STATUS ATTAINMENT*

I. BETA :

	EDYRS	SES
EDYRS	0.000	0.000
SES	0.560	0.000

II. GAMMA :

	FEDYRS	FSES
EDYRS	0.236	0.168
SES	0.000	0.083

III. PHI :

	FEDYRS	FSES
FEDYRS	1.000	
FSES	0.371	1.000

IV. PSI :

	EDYRS	SES
EDYRS	0.887	0.655

V. SQUARED MULTIPLE CORRELATIONS FOR STRUCTURAL EQUATIONS :

EDYRS	SES
0.113	0.345

TOTAL COEFFICIENT OF DETERMINATION FOR STRUCTURAL EQUATIONS IS 0.122

VI. MEASURES OF GOODNESS OF FIT FOR THE WHOLE MODEL :

CHI-SQUARE WITH 1 DEGREES OF FREEDOM IS 5.73 (PROB. LEVEL = 0.017)

GOODNESS OF FIT INDEX IS 1.000

ADJUSTED GOODNESS OF FIT INDEX IS 1.000

ROOT MEAN SQUARE RESIDUAL IS 0.004

TABLE 5.1.3. *T-VALUE OF THE LISREL ESTIMATES FOR THE BASIC MODEL OF STATUS ATTAINMENT*

I. BETA :		EDYRS	SES
	EDYRS	0.000	0.000
	SES	93.129	0.000
II. GAMMA :		FEDYRS	FSES
	EDYRS	32.374	22.991
	SES	0.000	13.840
III. PHI :		FEDYRS	FSES
	FEDYRS	0.000	
	FSES	0.000	0.000
IV. PSI :		EDYRS	SES
	EDYRS	98.367	98.367

First, we can look into the the explanatory power of the model which can be reflected in the squared multiple correlations for the model's two structural equations, namely, equations 51.1 and 51.2. They read 0.113 and 0.345 respectively. Jöreskog and Sörbom suggest that the squared multiple correlation for a structural equation can be interpreted as the proportion of variance in the dependent variable explained by the independent variables (Jöreskog and Sörbom, 1986:III.28). Hence, we can say that the basic model has explained about 10% of the variance in the educational attainment of the sons and daughters in the sample. On the other hand, the model has done much better in explaining the variance in status attainment because it has explained more than one-third of that variance. Furthermore, we can also look at the total coefficient of determination for the two structural equations in the model, which reads 0.122. Third, we can assess the explanatory power of the model by looking at the magnitude of each parameter and its t-value. The rule of thumb suggested by Jöreskog and Sörbom in judging the significance of the

estimated parameters is that "parameters whose t-values are larger than two in magnitude are normally judged to be different from zero" (Jöreskog and Sörbom, 1986:III.12). Accordingly, we can confidently take all the estimated parameters in the model to be statistically significant, because the magnitudes of all the t-values in Table 5.1.3. are well beyond the value of two.

Secondly, we can evaluate the overall fit of the model to the data. The LISREL program provides three measures for assessing the goodness of fit of the whole model. One is the X^2-measure and its associated degree of freedom and probability level. Jöreskog and Sörbom suggest that "instead of regarding X^2 as a test statistic one should regard it as a goodness (or badness) of fit measure in the sense that large X^2-values correspond to bad fit and small X^2-values correspond to good fit. The degrees of freedom serves as a standard by which to judge whether X^2 is large or small" (Jöreskog and Sörbom, 1986:I.39). Accordingly, we may say that the X^2-value (=5.73)is relatively large in comparison with its degree of freedom (=1). Therefore, it seems that the model does not fit the data well. The other two measures provided in the LISREL program are the goodness of fit index (GFI) and the root mean square residual (RMR). "Both of these measures should be between zero and one" (Jöreskog and Sörbom, 1986:I.40). However, they take on different properties. For GFI, the larger the value, the better the goodness of fit; while for RMR, it is the reverse. Accordingly, the values of these two measures presented in Table 5.1.2. suggest that the basic model fits quite the data well. Therefore, we may conclude that the model fits the data quite well but it can further be modified as suggested by the X^2-value.

TABLE 5.1.4. *MODIFICATION INDICES OF LISREL ESTIMATES FOR THE BASIC MODEL OF STATUS ATTAINMENT.*

I. BETA :		EDYRS	SES
	EDYRS	0.000	5.731
	SES	0.000	0.000
II. GAMMA :		FEDYRS	FSES
	EDYRS	0.000	0.000
	SES	5.731	0.000
III. PSI :		EDYRS	SES
	EDYRS	0.000	0.000

Again, the LISREL program has provided a set of modification indices which can help us to decide how the model should be modified. In the program, "for each parameter which is fixed in the model there is a modification index equal to the expected decrease in X^2 if this single parameter alone would be free." Thus, the practical procedure to improve the X^2-value is the following.

> Find the largest modification index for all fixed parameters. If this is larger than five, set this parameter free and re-estimate the model. The decrease in X^2 for the new model as compared with the old should be at least equal to the modification index. Often the decrease in X^2 will be much larger than the modification index. If the fit of the model is still bad this procedure can be repeated. Do not relax more than one parameter each time since the modification indices can change drastically from one solution to the next (Jöreskog and Sörbom, 1986:III.19).

Last but not least, Jöreskog and Sörbom underline that any modification must, first and foremost, be supported by substantive theory.

With reference to these guidelines, it seems that among the modification indices shown in Table 5.1.4. only one parameter meets with the requirement, that is, Gamma(2,1). Thus, the parameter is set free and the model is re-estimated. The results of this modified basic model are presented in Tables 5.1.5. to 5.1.7.. Though the magnitude of the parameter, Gamma(2,1), is comparatively small (=.015), its corresponding t-value (=2.394) is statistically significant. And most of all, the X^2-value has dropped to zero, which suggests that the modified model fits the data well. Therefore, we will accept this modified model as the basis for our further analyses.

TABLE 5.1 5. *LISREL ESTIMATES (MAXIMUM LIKELIHOOD) FOR THE MODIFIED BASIC MODEL OF STATUS ATTAINMENT*

I. BETA :

	EDYRS	SES
EDYRS	0.000	0.000
SES	0.557	0.000

II. GAMMA :

	FEDYRS	FSES
EDYRS	0.236	0.168
SES	0.015	0.078

III. PHI :

	FEDYRS	FSES
FEDYRS	1.000	
FSES	0.371	1.000

IV. PSI :

EDYRS	SES
0.887	0.655

V. SQUARED MULTIPLE CORRELATIONS FOR STRUCTURAL EQUATIONS

EDYRS	SESX
0.113	0.345

TOTAL COEFFICIENT OF DETERMINATION FOR STRUCTURAL EQUATIONS IS 0.122

VI. MEASURES OF GOODNESS OF FIT FOR THE WHOLE MODEL :

CHI-SQUARE WITH 0 DEGREES OF FREEDOM IS 0.00 (PROB. LEVEL = 1.000)

GOODNESS OF FIT INDEX IS 1.000

ROOT MEAN SQUARE RESIDUAL IS 0.000

TABLE 5.1.6. *T-VALUES OF LISREL ESTIMATES FOR THE MODIFIED BASIC MODEL OF STATUS ATTAINMENT.*

I. BETA :

	EDYRS	SES
EDYRS	0.000	0.000
SES	90.176	0.000

II. GAMMA :

	FEDYRS	FSES
EDYRS	32.374	22.991
SES	2.394	12.355

III. PHI :

	FEDYRS	FSES
FEDYRS	0.000	
FSES	0.000	0.000

IV. PSI :

EDYRS	SES
98.367	98.367

TABLE 5.1.7. *TOTAL EFFECTS FOR MODIFIED BASIC MODEL OF STATUS ATTAINMENT*

I. TOTAL EFFECTS OF X ON Y :

	FEDYRS	FSES
EDYRS	0.236	0.168
SES	0.147	0.172

II. TOTAL EFFECTS OF Y ON Y :

	EDYRS	SES
EDYRS	0.000	0.000
SES	0.557	0.000

III. DECOMPOSITION OF EFFECT :

	EFFECTS ON SES	
	BY FEDYRS	BY FSES
TOTAL EFFECT	0.147	0.172
DIRECT EFFECT	0.015	0.078
INDIRECT EFFECT	0.132	0.094

The modified basic model as a whole represents a simple but typical attainment path that young men and women in Hong Kong in the early 80's went through. Based upon this model, we can now look into the implications signified by these parameters. Subsequently, it is hoped that we can verify Hypothesis Three of this study, by proving that it is individual achievement rather than familial ascription which determines one's status attainment.

The most salient feature of the model is that, among the total effects presented in Table 5.1.7., the effect of EDYRS on SES is the largest (=0.557). It signifies that an individual's educational achievement has an essential effect on one's subsequent status attainment. Furthermore, the table also records that EDYRS is, in turn, affected by the two family-background variables in the model, i.e. FEDYRS and FSES. Their total effects are 0.236 and 0.168 respectively. Therefore, we can postulate that an individual's educational attainment acts as vital intervening variable between one's family background and status attainment in the model. We can further confirm this postulate by looking into the compositions of the total effects of FEDYRS and FSES on SES. According to Jöreskog and Sörbom's explication, these total effects can be decomposed into direct and indirect effects. The direct effects are simply GAMMA(2,1) and GAMMA(2,2) respectively, while the indirect effects are the difference between the corresponding total and direct effects (Jöreskog and Sörbom, 1986:III.39). The decomposition is presented in section III of Table 5.1.6.. From the decomposition, we can see that the effects of family background on an individual's status attainment are mainly via one's educational attainment. This is signified by the fact that the indirect effects of FEDYRS and FSES on SES are relatively larger than the corresponding direct effects.

To summarize, the modified basic model has been able to account for 34.5% of the variance of individual's status attainment. Among the effects which are all statistically significant, an individual's educational achievement contributes the largest direct effect. However, the total effects of family background are also considerable. Furthermore, family background also has significant effect on educational achievement. Thus, we may initially contend that status attainment in Hong Kong is not based solely on individual achievement, and familial ascription plays a significant part in one's status attainment path.

Based upon this initial result with the basic model, we can now further our exploration of the attainment path in Hong Kong by extending the model. One way to do that is to introduce some more family-background variables into the model as the Wisconsin model or the socialization model does.

2. SOCIALIZATION AND STATUS ATTAINMENT --- A TEST OF THE SOCIALIZATION MODEL

The analysis result of the basic model reveals that educational attainment plays an essential role as an intervening variable in the attainment path. In fact, such a result is congruent with the findings of mobility studies in other societies such as the United States and Britain (Blau and Duncan, 1967 163-177; and Halsey, 1977). As explained in Chapter One, these findings have triggered a new stream of researches within the mobility study tradition. This stream of researches, which has been called the socialization model, set out to explore other variables which may have affected individual's educational achievement. The most representative study is, of course, the Wisconsin study, which is a longitudinal study across the time span of eighteen years. It has

provided a comprehensive account of the socializing effects of both family and school on educational attainment.

As a cross-sectional study, the present study can in no way accommodate all the socialization variables that the Wisconsin study has explored. Thus, all we can do is inject into the basic model some additional variables which may help to account for the variance of educational attainment, and subsequently, to have a fuller comprehension of the operation of the attainment path prevailing in Hong Kong. From the census data under study, we can locate two such variables. They are the mother's educational attainment (MEDYRS) and the number of siblings in the family (SIBNO). But before we incorporate these two variables into the basic model, we must, first of all, settle their causal ordering with the other variables already in the model. As for the MEDYRS, we will simply take it as an antecedent variable with the same causal ordering as FEDYRS or FSES. In other words, we will not make any assumption on the temporal ordering between MEDYRS and FEDYRS or FSES as they are correlated with each other. As for the SIBNO, the matter is not that clear-cut, because the variable is measured by the reported number of children ever given birth by one's mother. However, since we do not know the birth order of an individual, we cannot tell whether one's education is attained prior to the arrival of one's brothers and/or sisters. We would therefore contend that the timing of the arrival of one's siblings is not the primary concern here. What does matter is the very existence of one's siblings and the effects that they bear upon one's chance and outcome of education as well as socialization. That is, we simply take the number of siblings as a contextual factor which affect one's socialization, and assume that SIBNO is causally prior to EDYRS and SES.

The extended model for status attainment which we are going to

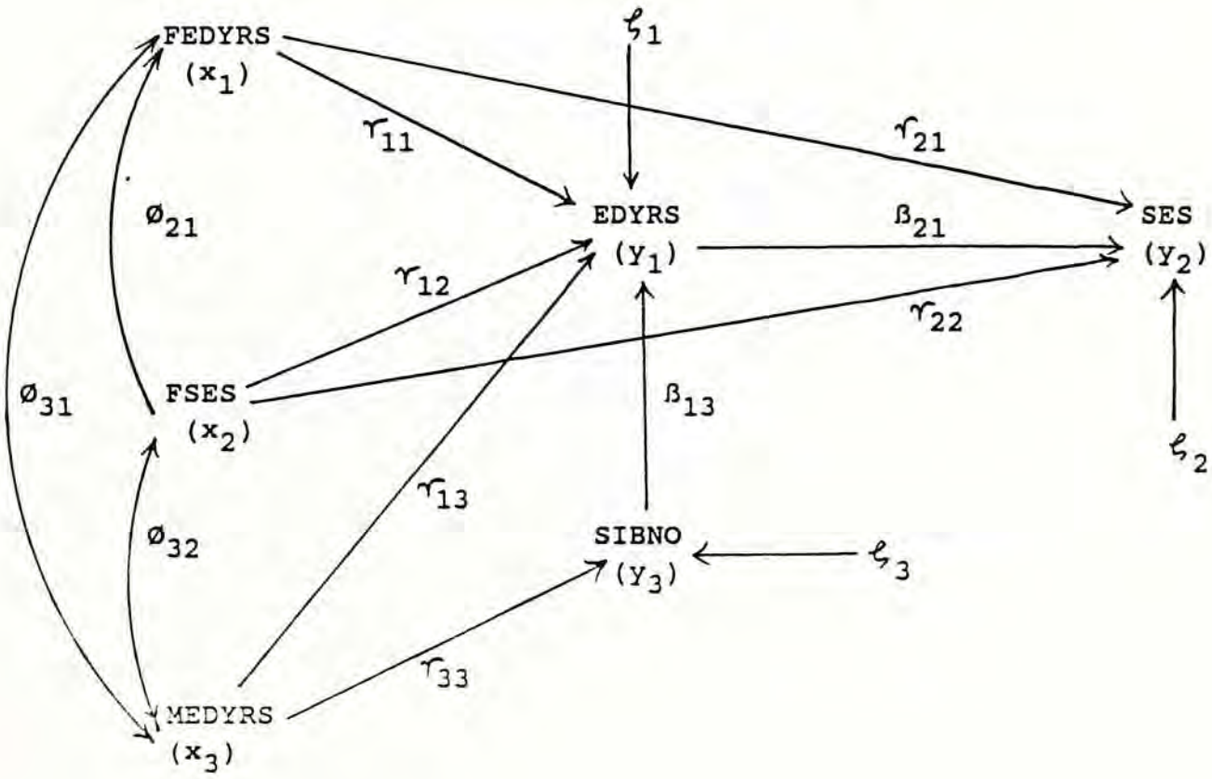
test in this section, will have three exogenous variables and three endogenous variables. The simple correlation matrix, upon which the LISREL analysis is based, is presented in Table 5.2.1.. The graphic representation of the model is presented in figure 5.2.1..

TABLE 5.2.1. PEARSON CORRELATION COEFFICIENTS
FOR THE SIX CONSTITUENT VARIABLES
IN THE EXTENDED MODEL OF STATUS ATTAINMENT (N=17576)

		VARIABLES					
VARIABLES		EDYRS	SES	SIBNO	FEDYRS	FSES	MEDYRS
EDYRS	(y_1)	1.00000					
SES	(y_2)	0.58165	1.00000				
SIBNO	(y_3)	-0.17134	-0.10581				
FEDYRS	(x_1)	0.29805	0.21049	-0.19188	1.00000		
FSES	(x_2)	0.25500	0.22619	-0.11390	0.37051	1.00000	
MEDYRS	(x_3)	0.27175	0.19282	-0.24105	0.51185	0.32282	1.00000

All coefficients are significant at 0.0001 level.

FIGURE 5.2.1. *Extended Model of Status Attainment*



Accordingly, the three structural equations that we are going to test are as follows.

$$y_1 = \beta_{13}y_3 + \gamma_{11}x_1 + \gamma_{12}x_2 + \gamma_{13}x_3 + \zeta_1 \qquad (52.1.)$$

$$y_2 = \beta_{21}y_1 + \gamma_{21}x_1 + \gamma_{22}x_2 + \zeta_2 \qquad (52.2.)$$

$$y_3 = \gamma_{33}x_3 + \zeta_3 \qquad (52.3.)$$

To present in matrix form, they are

$$\begin{bmatrix} y_1 \\ y_2 \\ y_3 \end{bmatrix} = \begin{bmatrix} 0 & 0 & \beta_{13} \\ \beta_{21} & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix} \begin{bmatrix} y_1 \\ y_2 \\ y_3 \end{bmatrix} + \begin{bmatrix} \gamma_{11} & \gamma_{12} & \gamma_{13} \\ \gamma_{21} & \gamma_{22} & 0 \\ 0 & 0 & 33 \end{bmatrix} \begin{bmatrix} x_1 \\ x_2 \\ x_3 \end{bmatrix} + \begin{bmatrix} \zeta_1 \\ \zeta_2 \\ \zeta_3 \end{bmatrix}$$

that is, $\underset{\sim}{y} = \underset{\sim\sim}{B}\underset{\sim}{y} + \underset{\sim\sim}{\Gamma}\underset{\sim}{x} + \underset{\sim}{\zeta}$

Subsequently, the parameters of the model are estimated by means of the LISREL computer program. The results of the analysis are recorded in Table 5.2.2. to 5.2.4.. Based upon these figures, we can evaluate the performance of this extended attainment model.

First of all, the extended model has been able to explain more than one-third of the variance in socioeconomic status, 13.2% of the variance in educational attainment, and 5.8% of that in number of siblings. Taken together, the total coefficient of determination for all three structural equations is 0.171. In comparison with the basic model, the extended model has been unable to make any improvement on explaining the variance in socioeconomic status. This is probably because the two newly injected variables are mainly catered to explain socialization and education outcome rather than status attainment. On the other hand, the extended model has made some progress in the explanation of the variance in educational attainment, that is, the variance explained has increased by about 2%. As for the newly added endogenous variable--SIBNO, the model has only been able to explain 5.3% of its variance. As for the properties

of individual parameters, we can see that all the parameters are statistically significant, because all the t-values in Table 5.2.3. are well beyond the value of two.

Secondly, the measures of goodness of fit for the extended model reveal that the model does not fit that well with the data. Though both the adjusted goodness of fit index (= 0.995) and the root mean square residual (= 0.018) suggest that the model fit the data well, the X^2 (=128.36) suggests otherwise. In comparison with its degree of freedom (=4), the magnitude of the X^2 is unacceptably large. Therefore, we may have to modify the original model to decrease the magnitude of the X^2.

TABLE 5.2.2. *LISREL ESTIMATES (MAXIMUM LIKELIHOOD) FOR THE EXTENDED MODEL OF STATUS ATTAINMENT*

I. BETA

	EDYRS	SES	SIBNO
EDYRS	0.000	0.000	-0.095
SES	0.557	0.000	0.000
SIBNO	0.000	0.000	0.000

II. GAMMA :

	FEDYRS	FSES	MEDYRS
EDYRS	0.166	0.145	0.117
SES	0.015	0.078	0.000
SIBNO	0.000	0.000	-0.241

III. PHI :

	FEDYRS	FSES	MEDYRS
FEDYRS	1.000		
FSES	0.371	1.000	
MEDYRS	0.512	0.323	1.000

IV. PSI :

EDYRS	SES	SIBNO
0.865	0.655	0.942

V. SQUARED MULTIPLE CORRELATIONS FOR STRUCTURAL EQUATIONS

EDYRS	SES	SIBNO
0.132	0.344	0.058

TOTAL COEFFICIENT OF DETERMINATION FOR STRUCTURAL EQUATIONS IS 0.171

VI. MEASURES OF GOODNESS OF FIT FOR THE WHOLE MODEL :

CHI-SQUARE WITH 4 DEGREES OF FREEDOM IS 128.36 (PROB. LEVEL = 0.000)

GOODNESS OF FIT INDEX IS 0.998

ADJUSTED GOODNESS OF FIT INDEX IS 0.995

ROOT MEAN SQUARE RESIDUAL IS 0.018

TABLE 5.2.3. *T-VALUES OF LISREL ESTIMATES FOR THE EXTENDED MODEL OF STATUS ATTAINMENT*

I. BETA :		EDYRS	SES	SIBNO
	EDYRS	0.000	0.000	-13.099
	SES	85.978	0.000	0.000
	SIBNO	0.000	0.000	0.000
II. GAMMA :		FEDYRS	FSES	MEDYRS
	EDYRS	19.699	18.896	13.824
	SES	2.285	11.775	0.000
	SIBNO	0.000	0.000	-32.924
III. PHI :		FEDYRS	FSES	MEDYRS
	FEDYRS	0.000		
	FSES	0.000	0.000	
	MEDYRS	0.000	0.000	0.000
IV. PSI :		EDYRS	SES	SIBNO
		93.734	93.734	93.734

TABLE 5.2.4. *MODIFICATION INDICES OF LISREL ESTIMATES FOR THE EXTENDED MODEL OF STATUS ATTAINMENT*

I. BETA :		EDYRS	SES	SIBNO
	EDYRS	0.000	0.821	0.000
	SES	0.000	0.000	0.064
	SIBNO	104.973	2.519	0.000
II. GAMMA :		FEDYRS	FSES	MEDYRS
	EDYRS	0.000	0.000	0.000
	SES	0.000	0.000	2.578
	SIBNO	118.630	27.122	0.000
III. PSI		EDYRS	SES	SIBNO
		0.000	0.000	0.000

According to the modification indices recorded in Table 5.2.4., we may modify the extended model by freeing GAMMA(3,1), which is not only the largest index in the table but also seems to be congruent with the theory that the educational levels of the wife and husband would affect the number of offspring that a family will raise. Thus, GAMMA(3.1) is free

and the model is re-estimated accordingly. The result of the modified model shows that the LISREL estimate of GAMMA(3,1) reads -0.093 and the corresponding t-value equals -10.928. Furthermore, the magnitude of the X^2 reads 9.33 with three degree of freedom. The decrease in the magnitude of X^2 from 128.36 to 9.33 significantly improved the model's goodness of fit. However, the magnitude of the X^2 is still unacceptably large when compared with its degree of freedom. Therefore, another modification may seem necessary.

According to the modification indices of the modified model, the next parameter qualified to be adjusted seems to be GAMMA(3,2). Its modification index reads 6.497. Furthermore, it also complies with the theoretical proposition that socioeconomic status and the family income are essential factors determining the number of children a family will raise. Subsequently, GAMMA(3,2) is freed and the model is estimated once again. The results of this further modified model are presented in Table 5.2.5. to 5.2.7..

First of all, the LISREL estimate of the newly added parameter reads -0.020, and its t-value equals -2.549. Thus, it is a statistically significant parameter. However, our main concern is whether the modification has made any improvement to the measures of goodness of fit for the model. Reading from Table 5.2.5., Section VI; we can see that the magnitude of the X^2 has dropped to 2.83, which is relatively small in comparison with its degrees of freedom (=2). It suggests that the modified model fits the data well. Furthermore, the readings of both the adjusted goodness of fit index (=1.000)and the root mean square residual (=0.002) also signify a similar conclusion. Therefore, we contend that the modified model fits the data well. for the model.

TABLE 5.2.5. *LISREL ESTIMATES (MAXIMUM LIKELIHOOD) FOR THE MODIFIED EXTENDED MODEL OF STATUS ATTAINMENT*

I. BETA	EDYRS	SES	SIBNO
EDYRS	0.000	0.000	-0.095
SES	0.557	0.000	0.000
SIBNO	0.000	0.000	0.000

II. GAMMA	FEDYRS	FSES	MEDYRS
EDYRS	0.166	0.145	0.117
SES	0.015	0.078	0.000
SIBNO	-0.087	-0.020	-0.190

III. PHI	FEDYRS	FSES	MEDYRS
FEDYRS	1.000		
FSES	0.371	1.000	
MEDYRS	0.512	0.323	1.000

IV. PSI	EDYRS	SES	SIBNO
	0.865	0.655	0.935

V. SQUARED MULTIPLE CORRELATIONS FOR STRUCTURAL EQUATIONS

EDYRS	SES	SIBNO
0.135	0.345	0.065

TOTAL COEFFICIENT OF DETERMINATION FOR STRUCTURAL EQUATIONS IS 0.174

VI. MEASURES OF GOODNESS OF FIT FOR THE WHOLE MODEL :

CHI-SQUARE WITH 2 DEGREES OF FREEDOM IS 2.83 (PROB. LEVEL = 0.243)

GOODNESS OF FIT INDEX IS 1.000

ADJUSTED GOODNESS OF FIT INDEX IS 1.000

ROOT MEAN SQUARE RESIDUAL IS 0.002

TABLE 5.2.6. *T-VALUES OF LISREL ESTIMATES FOR THE MODIFIED EXTENDED MODEL OF STATUS ATTAINMENT*

I. BETA	EDYRS	SES	SIBNO
EDYRS	0.000	0.000	-13.052
SES	85.929	0.000	0.000
SIBNO	0.000	0.000	0.000

II. GAMMA	FEDYRS	FSES	MEDYRS
EDYRS	19.644	18.893	13.935
SES	2.281	11.773	0.000
SIBNO	-9.932	-2.549	-22.046

III. PHI	FEDYRS	FSES	MEDYRS
FEDYRS	0.000		
FSES	0.000	0.000	
MEDYRS	0.000	0.000	0.000

IV. PSI	EDYRS	SES	SIBNO
	93.734	93.734	93.734

TABLE 5.2.7. *TOTAL EFFECTS FOR THE MODIFIED EXTENDED MODEL OF STATUS ATTAINMENT*

I. TOTAL EFFECTS OF X ON Y :

	FEDYRS	FSES	MEDYRS
EDYRS	0.175	0.147	0.135
SES	0.113	0.160	0.075
SIBNO	-0.087	-0.020	-0.190

II. TOTAL EFFECTS OF Y ON Y :

	EDYRS	SES	SIBNO
EDYRS	0.000	0.000	-0.095
SES	0.557	0.000	-0.053
SIBNO	0.000	0.000	0.000

III. DECOMPOSITION OF EFFECTS ON EDYRS

	BY FEDYRS	BY FSES	BY MEDYRS	BY SIBNO
TOTAL EFFECT	0.175	0.147	0.135	-0.095
DIRECT EFFECT	0.166	0.145	0.117	-0.095
INDIRECT EFFECT	0.009	0.002	0.018	0.000

IV. DECOMPOSITION OF EFFECTS ON SES :

	BY FEDYRS	BY FSES	BY MEDYRS	BY SIBNO	BY EDYRS
TOTAL EFFECT	0.113	0.160	0.075	-0.053	0.557
DIRECT EFFECT	0.015	0.078	0.000	0.000	0.000
INDIRECT EFFECT	0.098	0.082	0.075	-0.053	0.000

As for the explanatory power of this extended model, it has been able to account for 34.5% of the variance in socioeconomic status. In comparison with the performance of the modified basic model, we notice that there is no improvement on this aspect. Furthermore, this model has only accounted for 6.5% of the variance in the number of siblings. Nevertheless, the model has been able to explain 13.5% of the variance in educational attainment, that is 2.2% more than that of the basic model. Taken together, we can see that, in comparison with the basic model, the extended model has not improved much on the total variance explained. However, if we look at the change in the magnitudes of individual parameters, we will then be able to notice the contribution of the extended model to the understanding of the attainment process. In fact,

the extended model has provided us with a fuller and more detailed picture of how family background influenced the chances of status attainment among young men and women in Hong Kong in the early 80's. for the model.

From Section III in Table 5.2.7., we can see that all four family-background variables, i.e. FEDYRS, FSES, MEDYRS, and SIBNO, have significant effects on EDYRS. Furthermore, it is evident that they are mainly direct effects, which read 0.166, 0.145, 0.135, and -0.095 respectively. Third, there are differences among the direction of the effects. The effect of SIBNO is negative, while the others are positive. The former signifies the larger the number of siblings the less years of education are attained, while the latter suggests that educated parents and fathers of high socioeconomic status enhance the educational achievement of the sons and daughters. Hence, we can contend that one's family background affects his or her educational opportunities and outcomes.

As for the effect on SES, we can see from Section IV in Table 5.2.7., that EDYRS still has the largest total effect on SES (=0.557). On the other hand, the four family-background variables have also asserted considerable influence on SES. The total effects of the family background, however, are mainly made up of indirect effects. For instance, the indirect effects of FEDYRS and FSES are relatively larger than their direct effects; while the effects of MEDYRS and SIBNO are solely indirect. Therefore, we can postulate that the family-background variables indirectly affect SES via an intervening variable, namely EDYRS. Again, these effects take on two different values; the indirect effect of SIBNO on SES is negative, while the others are positive. To summarize, we have revealed that an individual's family background constrains his or her educational opportunities and outcomes, and this, in turn, conditions his

or her chances of status attainment.

However, it is worth emphasizing that in comparison with the basic model, the magnitudes of the effect of each family-background variable on both educational and status attainment has changed significantly. On one hand, the total effects of FEDYRS and FSES on EDYRS have dropped respectively from 0.236 and 0.168 in the basic model to 0.175 and 0.147 in the extended model. On the other hand, the total effects of FEDYRS and FSES on SES have also dropped from 0.147 to 0.113 and from 0.172 to 0.160 respectively. But these drops are by no means indiscernible. They are mainly due to the fact that two more family-background variables are added into the extended model. In fact, multicollinearity among these family-background variables has already been evident by their correlation coefficients, which have been recorded in Table 5.2.1.. Thus the drops of the total effect of FEDYRS and FSES on EDYRS and SES in the extended model can be viewed as a re-allocation of the effects among the family-background variables on educational and status attainment. As a result, the extended model can be regarded as presenting a fuller and more genuine picture of how different family-background variables affected educational and status attainment of young men and women in Hong Kong in the early 1980's.

3. STRUCTURAL CONSTRAINTS AND STATUS ATTAINMENT ---A TEST OF THE STRUCTURALIST MODEL

The attainment models which we have analyzed so far constituted only individuals' characteristics that affect their educational and status attainment. As explicated in Chapter One, within the status attainment study, such models belong to the so called "socialization model" tradition, which discerns attainment as an outcome of socialization and

tends to explain such outcome in terms of the individuals' characteristics. Such a research approach has been criticized for treating the attainment process as if it is taking place in a socio-economic vacuum and neglecting the structural constraints which affect the individuals' attainment opportunities. As a result of this criticism, a new research approach has been developed, which is known as the structural model. The objective of this research approach is to explore structural constraints which bear upon individuals and their attainment opportunities. The structural constraints revealed by the model include sex, race, structure of the labor market, and organization of work.

In the present study, I will analyze one of these structural constraints which affect the attainment opportunities of young men and women in Hong Kong. It is sex difference. It must be admitted that confining our analysis only to sex difference would limit our understanding of the overall effect of structural constraints on attainment opportunity in Hong Kong. However, due to the structure of the census data under study, it seems that we have to tolerate such a limitation for the time being.

To explore the effect of sex difference on attainment opportunities in Hong Kong, the sample used in the previous section will be divided into two sub-samples, one of which consists only of men and the other women. Based upon the modified extended model established in the previous section, separate LISREL models will then be constructed for each sub-sample. By comparing the parameters of the two models, we may be able to reveal the extent to which sex difference constrains the attainment opportunities of young men and women in Hong Kong (Cf. Sewell and Hauser, 1980; and Treiman and Terrel, 1975). The simple correlation matrices of the two sub-samples, upon which the LISREL models are based,

are recorded in Tables 5.3.1. and 5.3.2., and the results of the two LISREL models are contrasted in Tables 5.3.3. to 5.3.5..

TABLE 5.3.1. *PEARSON CORRELATION COEFFICIENTS FOR THE CONSTITUENT VARIABLES IN THE STATUS ATTAINMENT MODEL, MEN* (N = 9342)

		VARIABLES					
		EDYRS	SES	SIBNO	FEDYRS	FSES	MEDYRS
EDYRS	(y_1)	1.00000					
SES	(y_2)	0.49446	1.00000				
SIBNO	(y_3)	-0.16419	-0.07546	1.00000			
FEDYRS	(x_1)	0.27630	0.18107	-0.20586	1.00000		
FSES	(x_2)	0.24161	0.19955	-0.12382	0.35326	1.00000	
MEDYRS	(x_3)	0.26307	0.16232	-0.25705	0.51583	0.30818	1.00000

All coefficients are significant at 0.0001 level.

TABLE 5.3.2. *PEARSON CORRELATION COEFFICIENTS FOR THE CONSTITUENT VARIABLES IN THE STATUS ATTAINMENT MODEL, WOMEN* (N = 8235)

		VARIABLES					
		EDYRS	SES	SIBNO	FEDYRS	FSES	MEDYRS
EDYRS	(y_1)	1.00000					
SES	(y_2)	0.66936	1.00000				
SIBNO	(y_3)	-0.17904	-0.13316	1.00000			
FEDYRS	(x_1)	0.32284	0.24325	-0.17832	1.00000		
FSES	(x_2)	0.27008	0.25510	-0.10382	0.38977	1.00000	
MEDYRS	(x_3)	0.28183	0.22583	-0.22543	0.50696	0.33884	1.00000

All coefficients are significant at 0.0001 level.

TABLE 5.3.3. *LISREL ESTIMATES FOR THE MODIFIED EXTENDED MODEL OF STATUS ATTAINMENT, BY SEX*

		MEN			WOMEN		
I. BETA :		EDYRS	SES	SIBNO	EDYRS	SES	SIBNO
	EDYRS	0.000	0.000	-0.085	0.000	0.000	-0.105
	SES	0.469	0.000	0.000	0.647	0.000	0.000
	SIBNO	0.000	0.000	0.000	0.000	0.000	0.000
II. GAMMA :		FEDYRS	FSES	MEDYRS	FEDYRS	FSES	MEDYRS
	EDYRS	0.145	0.142	0.122	0.190	0.147	0.112
	SES	0.024	0.078	0.000	0.004	0.079	0.000
	SIBNO	-0.092	-0.030	-0.200	-0.083	-0.011	-0.180
III. PHI :		FEDYRS	FSES	MEDYRS	FEDYRS	FSES	MEDYRS
	FEDYRS	1.000			1.000		
	FSES	0.353	1.000		0.390	1.000	
	MEDYRS	0.516	0.308	1.000	0.507	0.339	1.000
IV. PSI :		EDYRS	SES	SIBNO	EDYRS	SES	SIBNO
		0.879	0.748	0.926	0.849	0.546	0.944
V. SQUARED MULTIPLE CORRELATIONS FOR STRUCTURAL EQUATION :		EDYRS	SES	SIBNO	EDYRS	SES	SIBNO
		0.121	0.252	0.074	0.151	0.454	0.056
TOTAL COEFFICIENT OF DETERMINATION FOR STRUCTURAL EQUATIONS IS :		0.171			0.182		
VI. MEASURES OF GOODNESS OF FIT FOR THE WHOLE MODEL :							
CHI-SQUARE WITH 2 DEGREES OF FREEDOM IS :		3.87 (PROB. LEVEL = 0.145)			5.33 (PROB. LEVEL = 0.070)		
GOODNESS OF FIT INDEX IS :		1.000			1.000		
ADJUSTED GOODNESS OF FIT INDEX IS :		1.000			1.000		
ROOT MEAN SQUARE RESIDUAL IS :		0.004			0.004		

TABLE 5.3.4. *T-VALUE FOR THE MODIFIED EXTENDED MODEL OF STATUS ATTAINMENT, BY SEX*

		MEN			WOMEN		
I. BETA		EDYRS	SES	SIBNO	EDYRS	SES	SIBNO
	EDYRS	0.000	0.000	-8.449	0.000	0.000	-10.008
	SES	49.709	0.000	0.000	74.133	0.000	0.000
	SIBNO	0.000	0.000	0.000	0.000	0.000	0.000
II. GAMMA		FEDYRS	FSES	MEDYRS	FEDYRS	FSES	MEDYRS
	EDYRS	12.435	13.510	10.507	15.498	13.136	9.247
	SES	2.453	8.020	0.000	0.398	8.807	0.000
	SIBNO	-7.688	-2.740	-17.035	-6.444	-0.891	-14.239
III. PHI		FEDYRS	FSES	MEDYRS	FEDYRS	FSES	MEDYRS
	FEDYRS	0.000			0.000		
	FSES	0.000	0.000		0.000	0.000	
	MEDYRS	0.000	0.000	0.000	0.000	0.000	0.000
IV. PSI		EDYRS	SES	SIBNO	EDYRS	SES	SIBNO
		68.330	68.330	68.330	64.152	64.152	64.152

TABLE 5.3.5. *TOTAL EFFECTS FOR THE MODIFIED EXTENDED MODEL OF STATUS ATTAINMENT, BY SEX*

I. TOTAL EFFECTS OF X ON Y :

	MEN			WOMEN		
	FEDYRS	FSES	MEDYRS	FEDYRS	FSES	MEDYRS
EDYRS	0.153	0.144	0.139	0.199	0.148	0.131
SES	0.096	0.146	0.065	0.132	0.175	0.085
SIBNO	-0.092	-0.030	-0.200	-0.083	-0.011	-0.180

II. TOTAL EFFECTS OF Y ON Y :

	MEN			WOMEN		
	EDYRS	SES	SIBNO	EDYRS	SES	SIBNO
EDYRS	0.000	0.000	-0.085	0.000	0.000	-0.105
SES	0.469	0.000	-0.040	0.647	0.000	-0.068
SIBNO	0.000	0.000	0.000	0.000	0.000	0.000

III. DECOMPOSITION OF EFFECT :

A. EFECTS ON EDYRS BY :

	MEN				WOMEN			
	FEDYRS	FSES	MEDYRS	SINO	FEDYRS	FSES	MEDYRS	SIBNO
TOTAL EFFECT	0.153	0.144	0.139	-0.085	0.199	0.148	0.131	-0.105
DIRECT EFFECT	0.145	0.142	0.122	-0.085	0.190	0.147	0.112	-0.105
INDIRECT EFFECT	0.008	0.002	0.017	0.000	0.009	0.001	0.019	0.000

B. EFECTS ON SES BY :

	MEN					WOMEN				
	FEDYRS	FSES	MEDYRS	SINO	EDYRS	FEDYRS	FSES	MEDYRS	SINO	EDYRS
TOTAL EFFECT	0.096	0.146	0.065	0.040	0.469	0.132	0.175	0.085	-0.068	0.647
DIRECT EFFECT	0.024	0.078	0.000	0.000	0.469	0.004	0.079	0.000	0.000	0.647
INDIRECT EFFECT	0.072	0.068	0.065	0.040	0.000	0.128	0.096	0.085	-0.068	0.000

Before we make any comparison between the models, we must first of all examine their overall performance. According to the measures of goodness of fit statistics, we may say that both models fit the data well. As recorded in Section VI of Table 5.3.3., the adjusted goodness of fit indices (=1.000) and root mean square residuals (=0.004) of both models indicate that the models fit the data well. As for the chi-squares of both models, they also support that the models fit the data well.

Furthermore, from Table 5.3.4., we can recognize that most of the LISREL estimates are statistically significant. However, two of the estimates in the women-model, i.e. GAMMA(2,2) and GAMMA(3,2), are proved to be insignificant because their t-values are much smaller than two. Thus, we must take this into account in the following comparison.

First of all, let us begin the comparison by looking at the overall performance of the three structural equations in the two models. From observing Section V of Table 5.3.3., we notice that there are considerable differences between the squared multiple correlations for the respective structural equations in the two models. In the structural equations for educational attainment, the squared multiple correlations read 0.121 in the men-model and 0.151 in the women-model. They indicate that the women-model can account for a much larger proportion of variance in educational attainment than the men-model. In fact, the squared multiple correlation of the women-model is about 20% larger than its counterpart. It suggests that the educational attainment of young women in Hong Kong is to a greater extent conditioned by the women's family background than by their male contemporaries. Furthermore, a more salient difference can also be detected between squared multiple correlations for the structural equations of status attainment. In fact, the squared multiple correlation of the women-model (=0.454) is more than 40% larger

than that of the men-model (=0.252). This signifies that in their status attainment process, young women in Hong Kong experience greater constraints from their family background and educational qualifications than men.

To further our understanding of the discrepancy on attainment opportunities between young men and women in Hong Kong, we can look into the effect of each family-background variable on educational and status attainment. From observing Section III (A) of Table 5.3.5., we notice that the direct effect of father's education on educational attainment is more than 20% larger among daughters than among sons. Furthermore, the direct effect of number of siblings on educational attainment is also about 20% larger among women than among men. Third, the direct effect of father's socioeconomic status on educational attainment is also slightly larger among women than among men. This signifies that the educational attainment of young women is much more likely to be constrained by their fathers' education and socioeconomic status. This also signifies that the negative effect of number of siblings on educational attainment is also greater among women than among men. Finally, the direct effect of mother's education on educational attainment is slightly larger among sons than among daughters. Taken together, among the four direct effects of family background on educational attainment, three of them are larger among women than among men. This further confirms that along their educational attainment path, young women in Hong Kong are confronted with greater constraint from their ascribed family background than their male contemporaries.

As for the effect on status attainment, education stands out to be the most prominent determining factor in both models. The direct effect of education on men's socioeconomic status is 0.469 and that on women's is

0.647, which are the largest parameters in both models. At the same time, we notice that there is a salient discrepancy between men and women on these effects . In fact, the effect of education on status attainment is more than 25% larger among women than men. It indicates that on the status attainment path, women rely more heavily on educational qualifications in order to achieve higher socioeconomic statuses than men. In other words, men are less constrained by their educational qualifications as they move along the socioeconomic hierarchy. Furthermore, as for the effects of family background on status attainment, they are mainly indirect effects which act upon status attainment via education. From Section III(B) of Table 5.3.5., we can see that the indirect and total effects of all four family-background variables are larger among women than men. This signifies once again that social backgrounds impose greater constraints on women on their status attainment paths than their male contemporaries.

To summarize the analyses in this section, we have revealed that both men and women share a similar attainment pattern, that is, family background asserts considerable impact on an individual's educational attainment, which in turn makes a significant difference in one's achievement on socioeconomic status. However, we have been able to prove that there are substantial differences in the effect of family background on educational and status attainment between men and women. First, we have revealed that most of the effects of family background on educational attainment are greater among women than among men. Second, we have found that educational qualifications impose a much greater effect on status attainment among women than among men. Third, we have also confirmed that the total effects of family background on status attainment, which are mainly indirect effect via education, are greater among women than among

men. Taken as a whole, the analyses have confirmed that young women in Hong Kong are confronted with much greater constraints from their ascribed family background in both the educational and status attainment processes than their male contemporaries. for the model.

These findings, in fact, are congruent with the structuralists' findings and contentions that females are structurally constrained in both educational and status attainments.

First of all, in educational attainment, our findings can find supporting evidences from a number of studies. First, in the Wisconsin study in 1965, Sewell and Shah found that family socioeconomic status had greater effects on female's educational aspiration and attainment than male's (Sewell & Shah, 1973:209, Fig.1; see also Sewell & Shah, 1968a & b). Second, in the 1975 follow-up study on the Wisconsin sample, Sewell and his colleagues again revealed found four of the family-background variables in the model accounting for educational attainment, i.e. parents' income, mother's education, mother's employment, and number of siblings, asserted greater effects on women than on men (Sewell, Hauser & Wolf, 1980:565-568). Third, Alexander and Eckland in their *Explorations in Equality of Opportunity Study* found that "female educational attainment is much more influenced by status origins and much less affected by tested ability than men's. While the reasons for this remain obscure, the differences are substantial" (Alexander & Eckland, 1980: 44; see also Alexander & Eckland, 1974). Four, Treiman and Terrell found that among the three family-background variables in their model accounting for educational attainment, two of them, i.e. mother's education and father's occupational prestige had greater effects on female than on male (Treiman & Terrell, 1975: 181, Tab.2). Five, Hauser and Featherman in a study on a sample of married couples in 1973 found that father's socioeconomic status

score weighed more heavily on the educational attainment of wives and husbands. (Featherman & Hauser: 470, Tab.4). Six, in a study in France, Robinson and Garnier found that father's education had greater effect on women's educational attainment than on men's. In the same regression equation, among the father's class categories included in the model, i.e. capitalist, manager, other supervisory, and petty bourgeoisie; three of them, except manager, had greater effects on women's educational attainment than on men's. (Roberson & Garnier, 1985:265, Tab3) Finally, a study on the 1976 Hong Kong census data also revealed that father's occupational status and employment status, mother's education, number of siblings, and birth order all had greater effects on women's educational attainment than on men's (Tang, 1981:198, Tab.8).

From these studies, two explanations of the differential in the effects of family-background variables on women's and men's educational attainment have emerged. One is the social psychological explanation. It suggests that in the socialization process boys and girls may experience different expectations and treatments which in turn may help the development of differentiated personality traits and aspirations. As a result, they may contribute to the differential in men's and women's educational attainment. The Wisconsin study is of particular importance in the development of this thesis. The findings of the Wisconsin study revealed that parental encouragement, teachers' encouragement and peer's influence, i.e. significant others' influence, had positive and significant effects on one's educational aspiration, which in turn asserted positive and significant effect on one's educational attainment (Sewell, Haller & Portes, 1969; Sewell & Hauser, 1975, ch.4; and Sewell, Hauser & Wolf, 1980). Furthermore, the study also found that the significant others' encouragement, i.e. parental and teachers'

encouragement, that boys received and the educational aspiration that they subsequently developed were less likely affected by parents' educational levels, or what some theorists (cf. Halsey, 1980, ch.5) called the cultural capital of the family (Sewell, Hauser & Wolf, 1980: 565-568, tab.6 & 7). In other words, boys are more likely to be encouraged by their parents and teachers to get ahead and to have high educational and occupational aspirations regardless of their family background, while the significant others' encouragement to girls and the aspiration they subsequently developed are more in line with the cultural capital of their families. Therefore, it explains why family-background variables have greater effect on women's educational attainment than on men's. However, due to the structure of the data set under study, the present study is unable to verify the validity of this social psychological thesis. Thus, for the time being all I can say is that it is one plausible explanation to our findings that is worth to be investigated in the future.

The second explanation of the differential in the effect of family background on women's and men's educational attainment is the economic explanation or the thesis of human capital investment. It suggests to view family as an economic unit investing in human capital, that is to construed the offspring's educational attainment of a family as the result of rational and deliberate act of investment in the human capital of the family (Schultz, 1974). Basically, an investment involves two factors. One is the economic capital available or the cost of making this capital available for investment and the other is the anticipated rate of return from the investment. The thesis helps to explain why family background has positive and significant effect on the offspring's educational attainment. It is because in the family of upper and middle classes the economic capital is available or the cost of making this

capital available will not affect much of the well being of the family. Furthermore, the thesis also renders an explanation to the differential in effect of family background on women's and men's educational attainment. It is because when a family is confronted with the problem of scarcity of economic capital and is forced to make choice on investment among its offspring, commonly it is the daughter's educational attainment that has to be sacrificed (Treiman & Terrell, 1975:177). That explains why among men and women of the same origin, men are less constrained by their family background than women. Once again, because of the structure of the data set under study, the present study is unable to offer an verification to this thesis in the Hong Kong context. However, we contend that it is another plausible explanation of the differential in the effect of family background on women's and men's educational attainment.

As for status attainment process, the finding of the present study can also find supporting evidences from a number of studies. However, it must be admitted that the evidences are not as conclusive as those of the educational attainment studies. First, for the differential in the effect of educational achievement on men's and women's status attainment, Hauser and Featherman's findings offers supporting evidence to ours. They found that in both the 1962 and 1973 samples of married couples in the United States, educational attainment assert greater effect on women's socioeconomic status scores than on men's (Hauser & Featherman, 1976: 472-473, tab.5-6). Second, as for the differential in the effect of family background on status attainment between men and women, Sewell and his colleagues' findings also provide some supporting evidence to ours. They found that parents' income, father's and mother's education had greater positive effect on women's status of first occupation than on men's. Furthermore, they also found that the negative effect of number of

siblings on women's first occupational status are greater than on of men's (Sewell, Hauser & Wolf, 1980:565-568).

A plausible explanation emerges from these studies is that the differential effect is due to the sex segregation among occupations in the labor market. In the United States, Sewell and his colleagues found that "whether we look at major occupational groups or at occupational status, women have marked different occupational distributions than man...regardlessof marriage and childbearing, women are excluded from the highest- and the lowest-status occupations" (Sewell, Hauser & Wolf, 1980:563). In Britain, Marshall and his colleagues also found that women were underrepresented in high-status occupations, such as professionals, managers and proprietors, and in low-status occupations such as manual workers. Women were, on the other hand, highly concentrated on mid-rank occupations such as routine non-manual, clerical and personal service occupations (Marshall et al., 1989:74). In light of such a differentiated occupational distributions between sexes, we may explain why educational attainment bears more weight on women's status attainment than on men's in two different directions.

From the upper end of the occupational hierarchy, it was evidenced in Britain that men relied less on educational credentials to gain admission into high-status occupations than women. Marshall and his colleagues revealed that within the high-status occupational categories, 16.3 percent of the male incumbents were of low educational qualifications, while only 10.4 percent of the female incumbents with equivalent educational qualifications were allowed to enter. Within the same occupational categories, 54.4 percent of the female incumbents were of high educational qualifications, while only 48.9 percent of the male incumbents have the same qualifications. It was evidenced from the same

study that among men and women with high educational qualifications, women's chances to be admitted into high-status occupations are much lower than men's. Only 61.8 percent of women with high educational credentials were in the high-status occupational categories, while the respective percentage for men was 91.2 (Marshall et al., 1989:80-81). Taken together, these findings have provided a plausible explanation to the differential in effect of educational qualification on men's and women's status attainment. At the upper end of the occupational hierarchy, women have to depend more on their educational attainment to gain admission, while male incumbents are less constrained by their educational credentials. Thus, it explains why the association between educational qualification and status attainment are stronger for women than for men.

On the other hand, it was also evidenced in the same study that in comparison with occupations at the lower end of the occupational hierarchy, which are overrepresented by male incumbents, the mid-rank occupations, which demand relatively high educational qualifications and training, are packed with female incumbents, (cf. Marshall et al., 1989:81, Tab. 4.11). Therefore, women who enter the labor force are more likely to be allocated into mid-rank occupations which required at least some forms of educational qualification or training, while men can participate in the labor force by entering into low-status occupations which demand less education and training. Thus, it explains why educational qualification bears more weight on women's occupational status than men's.

In the foregone discussion we have reviewed studies which can offer supporting evidences to our findings on the differentials in educational an status attainment of young men and women in Hong Kong.

We have also proposed some explanations of these differentials . However, it must be underlined that these explanations are only plausible and they are worth and need further exploration.

4. ACHIEVEMENT OR ASCRIPTION ? — A SUMMARY OF THE ANALYSES

In the foregone analyses, we have been able to reveal some of the features of the ladder of success confronting young men and women in Hong Kong in the early 80's. These features include:

1. Family background imposes considerable constraints upon the educational attainment opportunities for both men and women. Parents' education and father's socioeconomic status have positive effects on one's educational attainment, while number of siblings asserts a negative effect.
2. The status attainment opportunities for both men and women are mainly determined by their educational qualifications. However, family backgrounds also assert considerable effects on status attainment mainly indirectly through educational qualifications.
3. Although men and women are facing similar status attainment patterns, women are confronted with much greater constraints from family backgrounds and educational qualifications than men.

In light of these features, we can now set out to verify the third hypothesis of this study which states that *in Hong Kong, an individual's attainment of class situations depends on the individual's achievement rather than ascription.* As explained in Chapter Two, this hypothesis is derived from Parsons' famous dichotomy of ascription-

achievement and the functionalist thesis of meritocratic society (Bell, 1973:408-455; and Davis and Moore, 1945; Parsons, 1940). They contend that as a society modernizes, individual achievement will replace ascription to be the principal criterion for social stratification. Individual achievement refers to an individual's ability, both inborn and/or acquired, and effort, while ascription refers to an individual's family background, race, sex, and any other attributes which are beyond the control of one's ability and effort.

In view of the analysis results presented in this chapter, we can contend that the status attainment process in Hong Kong is by no means based solely on achievement. Although educational achievement has been revealed as the primary factor in determining an individual's socioeconomic status, it has also been confirmed that educational achievement is not the net result of an individual's ability and effort. In fact, it has been evidenced that all four family-background variables; that is, mother's education, father's education, father's socioeconomic status and number of siblings; assert significant effects on an individual's educational attainment. Taken together, these four variables account for 13.5% of the variance in educational attainment. Furthermore, the analysis also confirms that both father's education and socioeconomic status assert significant direct effect on the offspring's status attainment and all four family-background variables have significant indirect effects on status attainment via education. Finally, it has been proven that sex difference also has a significant impact on both the educational and status attainment processes. The analysis has established that women depend more heavily on educational qualifications in their status attainment process than men. Furthermore, family background imposes greater constraints on both educational and status attainment

among women than among men.

In conclusion, it has been proven that in Hong Kong, an individual's attainment of socioeconomic status does not depend solely on the individual's ability and effort, that is, achievement. Ascribed attributes such as family background and sex difference also significantly influence one's status attainment opportunity.

CONCLUSION:

IS HONG KONG AN OPEN SOCIETY ?

From the researches mentioned in the Prologue, we may conclude that it is the common perception of the Hong Kong Chinese that the colony is a land of abundant opportunities and these opportunities are distributed by achievement rather than by ascription. In other words, there is a strong belief that anyone who is able and hard-working will be guaranteed the opportunity for upward mobility. Accordingly, we identified the objective of the study to be to verify whether this subjective perception is an objective fact in the social structure of Hong Kong.

In light of all the discussions and analyses in the preceding chapters, I think it is time to answer this question. Let us begin with a recapitulation of the major findings of the study.

(1) In Chapter Three, we have revealed that among the 153 occupational groupings classified in the census data, there are wide variations in their socioeconomic status scores. In Weberian terms, this means that there are substantial differentials in the market situations among the economic classes in Hong Kong.

(2) In Chapter Four, we have substantiated that class inheritance is a common phenomenon between fathers and their sons and daughters in Hong Kong in the early 80's. In Weberian terms, this means that definite social closures of mobility opportunities are found

in the social structure of Hong Kong. More specifically, we have revealed four social classes within the economic order of Hong Kong, namely non-manual, skilled manual, semi-skilled manual, and unskilled manual labourers.

(3) Taken together, the findings in Chapters Three and Four suggest that a process of class structuration exists within the economic order in Hong Kong, that is, the differentials in market situations among economic classes have been constituted into a number of definite social closures of mobility opportunities.

(4) In Chapter Five, by making use of the status attainment models, we have been able to account for 34.5% of the variance in socio-economic status scores of young men and women who were age 15 to 27 and living in Hong Kong in 1981. Among the variables incorporated in the models, educational attainment asserts the greatest effect on status attainment opportunities, accounting for 31% of the variance in status scores. However, it has also been revealed that 13.5% of the variance in educational attainment is accounted for by the family-background variables in the models. Thus, this suggests that family backgrounds also assert considerable effects on status attainment indirectly via educational attainment.

(5) We have also substantiated that there are significant differences in the status attainment opportunities between young men and women in Hong Kong in the early 80's. It has been revealed that on their status attainment path, women are confronted with greater constraints from both family backgrounds and educational qualifications than their male contemporaries.

In light of these findings, we can contend that in an absolute sense, Hong Kong is not an open society. That is because within the social structure of Hong Kong, there prevails a number of definite social classes within which class inheritance and monopolization of social mobility opportunities are constituted and maintained. Second, as young men and women move along the existing ladder of success, achievement is by no means the sole determining factor for their attainments. Ascription, that is family backgrounds and sex differences, also asserts substantial effects on their opportunities for success.

It must be emphasized that the openness of a society can be assessed from two difference standpoints, namely absolute and relative openness.[1] In light of such a distinction, we can see that in the foregone paragraph, the openness of Hong Kong society was assessed from the absolute standpoint and our rejection of Hong Kong as an open society is based on a yardstick assuming a social structure of perfect mobility and a social selection mechanism based solely on achievement.

As for the assessment of the relative openness of a society, it can be accomplished in two different ways. One is the intra-society comparison, that is to compare mobility data collected from the same society but at different points in time, so as to see whether the society has become more open over time (Goldthorpe, 1987; Halsey, 1977; Hauser & Featherman, 1973; Hauser et al., 1975a & b; and Hope, 1980). The other approach is the inter-society comparison, that is to compare mobility data from different societies which are similar in structure. The objective of this kind of comparison is to find out which society is relatively more open (Erikson, 1983; Kerckhoff, 1974; Kerckhoff et al., 1985; and Treiman & Terrel, 1975).

Accordingly, the relative openness of Hong Kong society can be

assessed in these two ways. However, we cannot locate any research findings in Hong Kong which are of similar nature and in comparable format to the present study[2], thus it seems that we cannot make any intra-society comparison for the time being.

As for inter-society comparisons, we can certainly find a huge corpus of studies on class inheritance and status attainment in other societies to compare with, yet we must be careful with the problem of comparability, that is whether these data are comparable to that of the present study. In fact, Burawoy (1977) points out that comparisons of attainment studies between societies are not merely comparisons between mobility data but comparisons between the social structures within which these mobilities take place. Burawoy underlines that educational and occupational structures in each society are culturally and historically specific, thus he queries the reliability and validity of these kinds of comparative studies on status attainment processes between societies. Burawoy uses the comparative study between the United States and Great Britain done by Treiman and Terrel (1975) as an example to illustrate that in these comparative studies, the heterogeneity of the social structures are either completely over-sighted or they are homogenized by various statistical techniques of standardization. Hence, Burawoy criticizes that such studies "sacrifice understanding on the altar of technique ... (and) impose homogeneity upon heterogeneous social structures" (Burawoy, 1977:1031). Therefore, he contends that "the interpretation of status attainment can be undertaken only with reference to the historically specific social structure in which it occurs--in particular the patterns of empty places which define the educational and occupational structures" (Burawoy, 1977:1035).

On the other hand, Treiman rebuts Burawoy's criticism by

explicating in details that their comparison is theoretically and methodologically sound (Treiman, 1977:1043-1053). Apart from his rebuttal, Treiman also draws our attention to a more fundamental issue involved in the debate, that is "whether a quantitative comparative sociology is a sensible endeavor" (Treiman, 1977: 1053). Treiman certainly think that it is and I tend to agree with him. However we cannot simply beg the problem of comparability or Burawoy's criticism. Therefore, in comparing attainment processes among societies, we must first of all ask whether the social structures of these societies are comparable.

With Burawoy's criticism and the problem of comparability in mind, we find that most of the mobility studies in Western societies are neither culturally nor historically comparable to our study, which is based on the social structure of an oriental city still under British colonial rule in the early 80's. As for our neighboring countries, such as the three other Newly Industrialized Economies in East Asia, namely Singapore, Taiwan and South Korea (Deyo, 1987), we still find that their social structures are incomparable to the uniqueness of that of Hong Kong. On one hand, the occupational structures of both Taiwan and South Korea in which a large portion of their incumbents engage in agricultural production (Barrett & Chin, 1987:27, Tab.2) are apparently incomparable to that of Hong Kong whose incumbents are mainly employed in manufacturing and servicing industries. On the other hand, the major difference between the social structures of Hong Kong and Singapore is their ethnic compositions. Singapore is a multi-racial and multi-cultural society (Chiew, 1985:49, Tab.3.1.), while Hong Kong is inhabited by a population of which the majority are Chinese. Taken together, if we are to make any comparisons of the status attainment processes among these societies, we

must deal with the aforementioned structural differences between these societies sensibly and not to homogenize their heterogeneity. Obviously, such a job is beyond the scope of the present study. Hence, for the time being the question whether Hong Kong society is relatively more open than other societies will remain unanswered.

To summarize, the findings of this study reveal that in an absolute sense, Hong Kong is not an open society as her inhabitants perceive. However, this study has not been able to provide any assessment on the relative openness of Hong Kong's social structure.

Having said all this, it is time to illuminate the limitations and significance of the present study.

Methodologically, the present study apparently envisages a number of limitations. First, the data sets under analysis are cross-sectional data which only characterize individuals who resided in Hong Kong in March 1981. Furthermore, the data set used in mobility-table analysis and attainment study contains only sons and daughters who were aged fifteen to twenty-seven in 1981, that is at their early careers. As a result, the analysis only characterize one phase of the subjects' career, thus it can neither reveal any information on their intra-generation mobility nor provide any information on the temporal change in the class structure of Hong Kong. In other words, the study cannot tell whether Hong Kong has become more open over time. Finally, since the data contain only the concurrent occupational statuses of both fathers and sons, they do not reflect the occupational statuses of two generations.

In view of the nature of the data sets analyzed in this study and the methodological limitations derive from it, one may query the validity of the findings of this study. However, I would contend that though this study has envisaged some limitations as most other social researches do,

the findings and conclusion of this study are still basically valid and sound.

First of all, let us examine the findings and conclusion related to *Hypothesis 1.* It must be underlined that the data set used in the verification of *Hypothesis 1* is the 20% sample from 1981 Hong Kong census data which are arrayed by individual, while all the aforementioned limitations are derived from the 5% sample which are arrayed by household. Thus, all the queries and concerns discussed above in fact do not concern the findings and conclusion of *Hypothesis 1*, that is the discussion in Chapter Three.

Second, as for the findings and conclusion related to *Hypothesis 2*, that is the mobility-table analysis presented in Chapter Four, we have to admitted that the father's and son's or daughter's class categories in the mobility tables represent only their concurrent class positions in 1981 and do not indicate the class positions of two generations. However, we want to reiterate once again Duncan's criticism on mobility-table analysis that it is a built-in limitation in all mobility tables based on cross-sectional data that they are in no way be able to represent class categories of two generations (Duncan, 1966: 54-63; see also discussion in Chapter One Pp.35-37). Therefore, in our interpretation of the findings of mobility-tables analyses we have followed closely Duncan's recommendation that father's class position in mobility tables can only be viewed as son's or daughter's class origin rather than the class or occupational structure of the father's generation (Duncan, 1966:63). In fact, the mobility-table analysis conducted in Chapter Four has been confined to measure the interactions between class origins and destinations and to detect the existence of closure of mobility opportunities. Therefore, we contend that our interpretations of the

findings related to *Hypothesis 2* have never gone beyond the limitations that the data allow.

Third, the primary concern of testing *Hypothesis 3* is to find out whether status attainment in Hong Kong is governed by achievement or ascription. However, in light of the structure of the data, one may suspect that the effect of ascription found in our analysis is but a tautology of the attributes already contained in the data. That is because the data contain only sons' and daughters' early career, in other words, they have just made the first steps in their attainment paths. Therefore, their abilities and efforts, i.e. achievement, could not have exerted much impact on their occupational statuses yet. Thus, the findings and conclusion of the effect of ascription are spurious.

I think such a charge can be rebutted in two counts. First, in my opinion, such a criticism is based on narrowly defined conceptions of achievement and ascription. It has been well evidenced in studies of both sociology of education and status attainment that achievement and ascription exert their influences on one's attainment well before one enters into the labour market. In modern society, it all begins when a child leaves home on the first day of his/her schooling. The schooling system is where the whole machinery of social selection sets in motion and the starting point of the attainment process. In fact, findings of attainment studies consensually evidence that familial ascription exerts most of its influence on status attainment via educational attainment. This is also findings and conclusion of this study. Therefore, I will contend that if we put the achievement-ascription dichotomy in a wider context, that is not to confine our vision on occupational structure alone, we will then be able to understand of the effect of ascription revealed in this study. Second, even if one insists on looking at the

effect of achievement and ascription in the context of occupational structure, the finding and conclusion of this study is still not as unacceptable as it seems. In the corpus of attainment studies, it is not difficult to find studies which confine to early occupational attainment, for example, the famous Wisconsin Study Group has published numerous books and articles on their analyses of the early occupational attainment of the Wisconsin sample (Sewell & Hauser, 1975 & 1976; Sewell, Haller & Portes, 1969; Sewell, Haller & Ohlendorf, 1970; Sewell & Orenstein, 1965; Hauser, 1969; Hauser, Lutterman & Sewell, 1971; Haller & Sewell, 1967; Haller & Portes, 1973). Furthermore, it is evidenced in some studies that the effect of family background on occupational attainment does not decrease as an individual ascends the career ladder. For example, Sewell, Hauser and Wolf found that the effect of father's occupational status on son's early occupational status did not differ much from that on son's occupational status at his mid-thirties. The respective path coefficients of the two effects are .059 and .055 (Sewell, Hauser & Wolf, 1980: 556). Halsey's finding in a study on a sample of males who lived in Britain in 1972 even suggested that the effect of father's occupational status on son's first occupational status was less than that on son's occupational status in 1972. The respective path coefficients are .110 and .175 (Halsey, 1977: 180). In light of all these studies and findings, we will assert that though this study has been limited by its data to the analysis of early status attainment, its findings and conclusion of the effect of ascription are by no means spurious.

As for the theoretical limitations of this study, it has been underlined more than once in this dissertation that within the Weberian perspective, a saturated theory of social stratification should consist of three aspects, namely the economic aspect of classes, the cultural and

communal aspect of status groups, and the political aspect of parties. In the present study, only the market situations of economic and social classes have been explored. Furthermore, even within the study of class, this study has only investigated the objective aspect of class situations while the subjective aspects of class interests and class actions are apparently beyond the scope of this study.

However, even within such a limited theoretical scope, this study has addressed a number of significant theoretical issues in class study. The first and foremost issue is the conceptualization of class. In this study, I have tried to summarize a family of concepts used by different Weberians and integrate them into a coherent conceptual framework (cf. Chapter Two, Section 1). These concepts include economic and social classes, occupational status and prestige, differentials in educational and income levels, socioeconomic status, mobility opportunity, social closure, and class structuration. Furthermore, I have operationalized this conceptual framework by making use of the measures of socioeconomic status developed by Duncan and Lam and Powers, and the mobility-table analysis worked out by Goodman. Based upon this conceptual framework, I then addressed the issue of openness of society. I have substantiated that Hong Kong is not an open society in absolute sense, yet I cannot verify whether she is relatively more open than before or than her neighbors. However, I think the issue of the relative openness of Hong Kong society is a research problem worth further exploration. Third, this study has also address a theoretical issue which is more of local concern. As explicated in Prologue, a number of empirical studies have substantiated that Hong Kong Chinese strongly believe that Hong Kong is an open society. However, the findings of the present study suggest otherwise. Therefore, the issue is why there is such a discrepancy

between the subjective perception of the residents and the objective reality of the social structure. I have to admit that though the present study has revealed this discrepancy, it is beyond the scope of this study to provide answers to the issue. However, I would underline that this issue is again worth further investigation.

Methodologically, the significance of the study is two-fold. It provides researches on Hong Kong society with measures on two of the most commonly used variables, namely socioeconomic status and social class categories. Furthermore, the findings of this study have also laid the groundwork for further investigations on various aspects of the class structure and social stratification in Hong Hong society. First, by adopting the analytical framework worked out in this study, similar analyses can be carried out with the 1976 and 1986 census data. Subsequently, we have a clear picture of the temporal changes in the class structure and attainment path existing in Hong Kong society. In other words, we will be able to give an assessment to the relative openness of Hong Kong society over time. Second, in light of the findings of this study on the objective aspect of class situations, we can extend this class study into the subjective aspect of class interests and actions in Hong Kong. For example, one can study how social closures, both as exclusion and usurpation, are perceived, constructed and maintained through class actions waged by different social classes in Hong Kong. Third, based upon the findings of this study on economic and social classes, investigations can be conducted to see how status groups and political amalgamations are organized among social classes so as to have a more comprehensive understanding on the pattern of social stratification and the nature of domination in Hong Kong society.

NOTES

CHAPTER 1 ON THE SHOULDERS OF A GIANT: REVIEW OF LITERATURES

1 For a general definition of class within the relational perspective, please refer to Giddens, 1981 : 85. As for the different conceptions of relational network advocated by various sociologists, please refer to Giddens, 1981:23-98.

2 The regression equation that Duncan has come up with is that

$$X = 0.59Y + 0.55Z - 0.6$$

where X is the percentage of "excellent" or "good' rating received by an occupation in NORC prestige survey;
Y is the proportion of men in the occupation with income of $3,500 or more, in the 1950's census; and
Z is the proportion of men in the occupation with four years of high school or higher educational attainment, in the 1950's census (Duncan, 1961:124-125).

3 Apart from this uni-indicator approach which uses occupation as the sole indicator, there is another approach using multi-indicator approach, for instance, Sewell et al., 1969; and cf. Nam & Powers, 1983:58-776.

4 Economic class, in fact, is not a term coined by Weber himself. It is used by some Weberian, such as Giddens (1981:41-52) and Collins (1986: 132-138), to connote a family of concept used by Weber in different phases of his career, they include the early conception of class (Weber, 1978:926-940) and the latter conception of property class and commercial class (Weber, 1978:302-307).

5 There have been some controversies over whether Giddens should be viewed as a Weberian. Though Giddens himself declines to be labeled as such (Giddens, 1981:297), yet quite a number of reviewers think otherwise. They include Ashcraft (1979), Barbalet (1982:484 & note 2), Binns (1977:47-54), Crompton and Gubbay (1977:29-40), and Sarre (1989:93). In view of the evidences presented by both sides, I tend to agree to the fact that Giddens is in essence a Weberian. Thus, he will be classified as such in this study.

6 According to Giddens' thesis, there are basically three factors affecting the process of class structuration. They are (1) the overall organization of the productive enterprise and the distributive groupings (Giddens, 1981:108-109), (2) the form of class consciousness; (112-117), (3) the form of power and the form of state (118-127). These three factors in fact correspond quite neatly with Weber's classification of class, status group, and political party. They also appear to be congruent with some Neo-Marxist classification of economic, ideological and political forces in class formation

(Poulantzas, 1978 :13-24). Taken together, both Weberian and Marxist seem to agree to that the formation of social class depends on the economic and market formation, the cultural and communal formation, and the power and political formation.

7 The following explication is based only on the conception of Nicos Poulantzas (1978) and Erik Olin Wright (1978a & 1979).

8 Poulantzas' original formulation consists of three categories. The category of legal ownership is not relevant here and therefore has not been explicated (Poulantzas, 1978:19; cf. Wright, 1979:33).

CHAPTER 2 THE STUDY

1 In the data prepared by the Census and Statistics Department, economically active refers to those respondents whose "Activities Status" code is great than 30 (Census & Statistics Dept., 1981c: 17-18).

2 The computation of the socioeconomic status scores for occupational titles in Hong Kong will be explained in greater detail in Chapter Three of this dissertation.

CHAPTER 3 BUILDING THE OCCUPATIONAL HIERARCHY

1 The variable "Educational Attainment" is recoded into "Years of Education", a variable in interval scale, in the following ways:

Educational Level		Years of Education
00	No schooling	0
01	Kindergarten	2
11	Lower Primary (P1 to P4)	6
12	Upper Primary (P5 to P6)	8
21	Form1/Middle1	9
22	Form2/Middle2	10
23	Form3/Middle3	11
24	Form4/Middle4	12
25	Form5/Middle5	13
41	Craft (including Apprenticeship) Courses	13
31	Form6/7/Middle6	15
42	Diploma/Certificate Courses (Technician Level)	15
43	Endorsement Certificate Courses	15
51	Diploma/Certificate Courses in Colleges of Education or Technical Teachers' Collage	17
52	Nurse Training Courses	17
62	Higher Diploma	17

71	Non-Degree (Diploma/Certificate) Courses	17
81	Degree Courses	18
82	Post-graduate Courses (including Post-graduate Degree & Diploma/ Certificate Courses)	20

2 For the Human Capital theory or more general Technical Functionalism, see Clark (1962) and Schultz (1961); as for the Post-industrial Society thesis, refer to Bell (1977); and for theory of the Credential Society, see Collins (1979).

3 I can only locate one survey on occupational prestige of Hong Kong, which was conducted by F.C. Chung in 1977 (Chung, 1977). However, the sample of the survey is far from representative, because the respondents were confined to the "working parents and siblings of 546 students from the Department of Sociology and Social Work, and of Business Management (of Hong Kong Baptist College)" (Chung, 1977:7). Furthermore, the result of the survey contains some findings which are not congruent with the general result of most of the similar surveys conducted in other countries (Treiman, 1977). For example, the occupational prestige score of "policeman" is the second lowest among the 113 occupations under study, that is, it is ranked after occupations such as street sweeper, janitor, hawker, and domestic servant. The only explanation to this "peculiar" finding that the author could provide is, "The ranking of the policeman after the street sweeper may be variously interpreted. Like all the others, this finding is peculiar to Hong Kong" (Chung, 1977:15). In light of all this, I am not going to take into account the result of Chung's survey in the present study.

4 To be in line with the most of the related studies, such as Duncan's (1961), Lam and Powers'(1983), Siegel's (1971), and Goldthorpe and Hope's (1974), the present study will only concentrate on the civilian labor force. Therefore, those occupational subgroups whose three-digit codes are 001 to 011 in the census data will be excluded. They include armed forces, not applicable, and workers not classifiable by occupation (Census and Statistics Dept., 1981:31).

CHAPTER 4 IN SEARCH OF A CLASS STRUCTURE

1 The mobility table analyses which are based on or start with Blau and Duncan's 17-category schema are Vanneman (1977), Pullum (1975), Featherman and Hauser (1978), Hauser et al. (1975a & b), Breiger (1981), and Hout (1981).

2 The index of dissimilarity is the proportion of cases which must be shifted in either the array of the observed frequencies or that of the expected frequencies in order to equalized the two arrays. Thus it can be interpreted as cases which are "misplaced" or "unexplained" by a particular log-linear model. (cf. Pullum, 1975:60-61; Hout, 1983:15; & Taeuber & Taeuber, 1965:235-236) The calculation of the index (D) can

be expressed as follow :

$$D = 1/2 \text{ (sum of absolute value of } F_{ob} - F_{ex})/N$$

where F_{ob} = observed frequencies
F_{ex} = expected frequencies
N = total number of cases

3 Blau and Duncan work out a mobility ratio, which is a ratio of the observed frequencies to expected frequencies, to detect the occupational inheritance in a mobility table (1967:30-38). By the same token, the present study will make use of another device, which is also based upon the difference between the observed and expected frequencies in a Perfect Mobility Model, to analyze the phenomenon of class inheritance, that is the adjusted residuals found in the SPSSX output. (Norusis, 1985:330) The significance of the parameter can be found in the text that follows.

CONCLUSION IS HONG KONG AN OPEN SOCIETY?

1 The analytical distinction between absolute and relative openness is borrow from the discussions on equality presented by Rae et al. (1980) and Coleman (1973). Similar analysis can also be found in Goldthorpe discussion on the openness of the British society (1987:27-29).

2 Stephen Tang (1981) made use of a one percent random sample from the 1976 Hong Kong census data to explore the effects of familial structures and backgrounds on the differentials in educational attainment. However, the main objective of Tang's study is to account for educational attainment rather than status attainment. Furthermore, some of the key variables in Tang's study, such as class position, are operationalized in such a different way that it has made the present study quite incomparable to Tang's.

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